Welcome to STN International! Enter x:x

NEWS 32 JAN 28 MARPAT searching enhanced

LOGINID:SSPTAKAB1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * *
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG	06	CAS REGISTRY enhanced with new experimental property tags
NEWS	3	AUG	06	FSTA enhanced with new thesaurus edition
NEWS	4	AUG	13	CA/CAplus enhanced with additional kind codes for granted
				patents
NEWS	5	AUG		CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS	6	AUG	27	Full-text patent databases enhanced with predefined
				patent family display formats from INPADOCDB
NEWS		AUG		USPATOLD now available on STN
NEWS	8	AUG	28	CAS REGISTRY enhanced with additional experimental
	_			spectral property data
NEWS	9	SEP	07	STN AnaVist, Version 2.0, now available with Derwent
				World Patents Index
NEWS		SEP		FORIS renamed to SOFIS
		SEP		INPADOCDB enhanced with monthly SDI frequency
NEWS	12	SEP	1/	CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS	13	SEP	17	CAplus coverage extended to include traditional medicine
				patents
NEWS		SEP		EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	15	OCT	02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	16	OCT	19	BEILSTEIN updated with new compounds
NEWS		NOV		Derwent Indian patent publication number format enhanced
NEWS	18	NOV	19	WPIX enhanced with XML display format
NEWS	19	NOV	30	ICSD reloaded with enhancements
NEWS	20	DEC	04	LINPADOCDB now available on STN
NEWS	21	DEC	14	BEILSTEIN pricing structure to change
NEWS	22	DEC	17	USPATOLD added to additional database clusters
NEWS	23	DEC	17	IMSDRUGCONF removed from database clusters and STN
NEWS		DEC	17	DGENE now includes more than 10 million sequences
NEWS	25	DEC	17	TOXCENTER enhanced with 2008 MeSH vocabulary in
				MEDLINE segment
NEWS		DEC		MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS		DEC		CA/CAplus enhanced with new custom IPC display formats
NEWS	28	DEC	17	STN Viewer enhanced with full-text patent content
				from USPATOLD
NEWS		JAN		STN pricing information for 2008 now available
NEWS	30	JAN	16	CAS patent coverage enhanced to include exemplified
				prophetic substances
NEWS	31	JAN	28	USPATFULL, USPAT2, and USPATOLD enhanced with new
				custom IPC display formats

NEWS 33 JAN 28 USGENE now provides USPTO sequence data within 3 days of publication

NEWS 34 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment

NEWS 35 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements

NEWS 36 FEB 08 STN Express, Version 8.3, now available

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 16:20:03 ON 12 FEB 2008

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

0.21

TOTAL ENTRY SESSION

0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 16:20:10 ON 12 FEB 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 FEB 2008 HIGHEST RN 1002789-56-1 DICTIONARY FILE UPDATES: 11 FEB 2008 HIGHEST RN 1002789-56-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

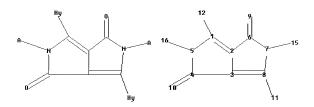
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Oueries\10551976.str



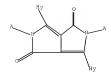
```
9 10 11 12 15 16
ring nodes :
1 2 3 4 5 6 7 8
chain bonds :
1-12 4-10 5-16 6-9 7-15 8-11
ring bonds :
1-2 1-5 2-3 2-6 3-4 3-8 4-5 6-7 7-8
exact/norm bonds :
1-2 \quad 1-5 \quad 1-12 \quad 2-3 \quad 2-6 \quad 3-4 \quad 3-8 \quad 4-5 \quad 4-10 \quad 5-16 \quad 6-7 \quad 6-9 \quad 7-8 \quad 7-15 \quad 8-11
isolated ring systems :
containing 1 :
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:CLASS
11:Atom 12:Atom 15:CLASS 16:CLASS
Element Count :
Node 11: Limited
    N, N1-2
    C.C4-5
Node 12: Limited
```

L1 STRUCTURE UPLOADED

=> d L1 L1 HAS NO ANSWERS L1 STR

N, N1-2 C, C4-5

chain nodes :



Structure attributes must be viewed using STN Express query preparation.

=> caslink

CASLINK IS NOT A RECOGNIZED COMMAND

"HELP COMMANDS" at an arrow prompt (=>).

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter

=> file caslink

FULL ESTIMATED COST

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

0.67

0.46

FILE 'CAPLUS' ENTERED AT 16:20:45 ON 12 FEB 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

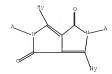
FILE 'MARPAT' ENTERED AT 16:20:45 ON 12 FEB 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

FILE 'REGISTRY' ENTERED AT 16:20:45 ON 12 FEB 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

CLUSTER 'CASLINK' ENTERED

Predefined command sequences will be executed in REGISTRY, MARPAT, and CAPLUS.

=> d L1 L1 HAS NO ANSWERS L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> S L1 SSS SAM

S L1 SSS SAM FILE=REGISTRY

SAMPLE SEARCH INITIATED 16:21:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 595 TO ITERATE

100.0% PROCESSED 595 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 10437 TO 13363

PROJECTED TIERATIONS: 1043/10 1336.

L2 1 SEA SSS SAM L1 1 FILES SEARCHED...

S L2 SSS SAM FILE=MARPAT
SAMPLE SEARCH INITIATED 16:21:26 FILE 'MARPAT'
SAMPLE SCREEN SEARCH COMPLETED - 520 TO ITERATE

100.0% PROCESSED 520 ITERATIONS 2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 9052 TO 11748
PROJECTED ANSWERS: 2 TO 125

L3 2 SEA SSS SAM L1 1 FILES SEARCHED...

=> D scan L3

L3 2 ANSWERS MARPAT COPYRIGHT 2008 ACS on STN

IC ICM C07D487-04

NCL 548453000

CC 42-6 (Coatings, Inks, and Related Products)

Section cross-reference(s): 28

TI Viscosity reducing 1,4-diketo-3,6-diarylpyrrolo[3,4-c]pyrrole derivatives

ST diaryldiketopyrrolopyrrole quinacridone viscosity reducing agent; coating pigment viscosity reducing agent

IT Paints

Pigments, nonbiological

(diaryldiketopyrrolopyrrole derivative viscosity reducing agents for pigment dispersions for paints)

IT Automobiles

(finish; diaryldiketopyrrolopyrrole derivative viscosity reducing agents for pigment dispersions for paints)

IT Viscosity

(lowering agents; diaryldiketopyrrolopyrrole derivative viscosity reducing agents for pigment dispersions for paints)

IT 180640-94-2P

RL: IMF (Industrial manufacture); PREP (Preparation)

(diaryldiketopyrrolopyrrole derivative viscosity reducing agents for pigment dispersions for paints)

IIT 200356-69-0DP, sulfonated 200356-69-0P 200702-73-4P 200702-74-5P
200702-88-1P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(diaryldiketopyrrolopyrrole derivative viscosity reducing agents for pigment dispersions for paints)

IT 180640-82-8

RL: MOA (Modifier or additive use); USES (Uses)

(diaryldiketopyrrolopyrrole derivative viscosity reducing agents for pigment dispersions for paints)

IT 30525-89-4, Paraformaldehyde 54660-00-3, 1,4-Diketo-3,6-

diphenylpyrrolo[3,4-c]pyrrole

RL: RCT (Reactant); RACT (Reactant or reagent)

(diaryldiketopyrrolopyrrole derivative viscosity reducing agents for pigment dispersions for paints)

MSTR 1

G1 = pyridyl

Patent location: claim 1

Note: substitution is restricted

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 2 ANSWERS MARPAT COPYRIGHT 2008 ACS on STN

IC ICM C07D487-04

ICS C09K009-02

ICA C07D213-20; C07D221-06; C07D215-04; C07D215-10

ICI C07D487-04, C07D209-00, C07D209-32

CC 28-2 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 41, 74, 76

TI Preparation of electrochromic diketopyrroles for electrochromic display devices

 ${\tt ST} \quad \mbox{ diketopyrrole prepn electrochromic material; display device electrochromic diketopyrrole} \\$

IT Electrochromic materials

(diketopyrroles)

IT Optical imaging devices (electrochromic, diketopyrrole-containing media for)

IT Dyes

(electrochromic, diketopyrroles)

IT 164790-12-9P 164790-14-1P 164790-16-3P 164790-18-5P 164790-20-9P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of electrochromic diketopyrroles for electrochromic display devices)

IT 88949-27-3 88949-28-4 88949-39-7 164790-21-0 164790-22-1
 RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of electrochromic diketopyrroles for electrochromic display devices from)

IT 7681-53-0, Sodium hypophosphite 13943-58-3, Potassium ferrocyanide RL: DEV (Device component use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(preparation of electrochromic diketopyrroles for electrochromic display devices media containing)

MSTR 1

G1 = alkylcarbonyl <containing 1-14 C>

G5 = 15

1**9**6 ● 616

G6 = 29

G12 = 22

,96 • G16

Patent location: claim 1

Note: substitution is restricted

ALL ANSWERS HAVE BEEN SCANNED

=> d his

(FILE 'HOME' ENTERED AT 16:20:03 ON 12 FEB 2008)

FILE 'REGISTRY' ENTERED AT 16:20:10 ON 12 FEB 2008

LI SIRUCIURE UPLOADED

FILE 'CAPLUS, MARPAT, REGISTRY' ENTERED AT 16:20:45 ON 12 FEB 2008 L2 1 S L1 SSS SAM FILE=REGISTRY

L3 2 S L2 SSS SAM FILE=MARPAT

=> S L1 SSS Ful

S L1 SSS FUL FILE=REGISTRY

FULL SEARCH INITIATED 16:22:39 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 11367 TO ITERATE

18 ANSWERS

39 ANSWERS

100.0% PROCESSED 11367 ITERATIONS

SEARCH TIME: 00.00.01

L4 18 SEA SSS FUL L1

18 SEA SSS FUL L

S L4 SSS FUL FILE=MARPAT

FULL SEARCH INITIATED 16:22:40 FILE 'MARPAT'

FULL SCREEN SEARCH COMPLETED - 10490 TO ITERATE

100.0% PROCESSED 10490 ITERATIONS SEARCH TIME: 00.00.08

L5 39 SEA SSS FUL L1

1 FILES SEARCHED...

S L4 FILE=CAPLUS

L6 6 FILE CAPLUS

1 FILES SEARCHED...

SET DUPORDER FILE

SET COMMAND COMPLETED

DUP REM 1.5 1.6

PROCESSING COMPLETED FOR L5

PROCESSING COMPLETED FOR L6

L7 40 DUP REM L5 L6 (5 DUPLICATES REMOVED)

ANSWERS '1-38' FROM FILE MARPAT

ANSWERS '39-40' FROM FILE CAPLUS

=> D SCAN L6

L6 6 ANSWERS CAPLUS COPYRIGHT 2008 ACS on STN

IC ICM C07D471-04

ICS G11C013-04; G11B007-24

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes) Section cross-reference(s): 41 TI Optical memory devices containing color changeable dyes, and dyes therefor ST fluorescent dye optical recording; memory device optical dye IT Dyes (fluorescent, preparation of, for optical memory devices) IT Memory devices Recording materials (optical, fluorescent dyes for) 128-69-8P 579-74-8P 54177-02-5P 128318-44-5P, 2-Methoxybenzoylsuccinic acid dimethyl ester 128318-45-6P 128318-63-8P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction of, fluorescent dye for optical memory device from) 41572-87-6P 70485-42-6P 106822-31-5P 110590-74-4P 110590-75-5P 110590-76-6P 110590-77-7P 110590-78-8P 110590-79-9P 110590-80-2P 110590-81-3P 110590-82-4P 110590-83-5P 110590-84-6P 110613-98-4P 118560-90-0P 118560-91-1P 118560-92-2P 118560-93-3P 118560-94-4P 118560-95-5P 119273-54-0P 119273-55-1P 128318-46-7P 128318-47-8P 128318-48-9P 128318-49-0P 128318-50-3P 128318-51-4P 128318-52-5P 128318-53-6P 128318-54-7P 128318-55-8P 128318-56-9P 128318-57-0P 128318-58-1P 128318-59-2P 128318-60-5P 128318-61-6P 128318-62-7P RL: PREP (Preparation) (preparation of, as color changeable dye in optical memory device) HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0 => D L7 ibib abs fghit L7 ANSWER 1 OF 40 MARPAT COPYRIGHT 2008 ACS on STN DUPLICATE 1 ACCESSION NUMBER: 141:351424 MARPAT Full-text Fluorescent diketopyrrolopyrroles Yamamoto, Hiroshi; Dan, Norihisa Ciba Specialty Chemicals Holding Inc., Switz. PCT Int. Appl., 83 pp. CODEN: PIXXD2

TITLE: INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: _____

| PAT | ENT : | | | KI | ND | DATE | | | Al | | | M MC | | DATE | | | |
|-----|-------|-----|-----|-----|-----|------|------|-----|-----|------|------|------|-----|------|------|-----|-----|
| WO | | | | A | 1 | | | | W | | | | | 2004 | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, |
| | | ΤJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW |
| | RW: | BW, | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, |
| | | BY, | KG, | ΚZ, | MD, | RU, | ΤJ, | TM, | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, |
| | | ES, | FΙ, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MC, | NL, | PL, | PT, | RO, | SE, | SI, |
| | | SK, | TR, | BF, | ΒJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, |
| | | TD, | TG | | | | | | | | | | | | | | |
| EΡ | 1611 | 207 | | A. | 1 | 2006 | 0104 | | E | P 20 | 04-7 | 2505 | 1 | 2004 | 0401 | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | PL, | SK, |

| CN 1771298 | A | 20060510 | CN | 2004-80009420 | 20040401 |
|-----------------------|----|----------|----|---------------|----------|
| JP 2006524281 | T | 20061026 | JP | 2006-505506 | 20040401 |
| US 2007010672 | A1 | 20070111 | US | 2005-551976 | 20051005 |
| MX 2005PA10866 | A | 20060605 | MX | 2005-PA10866 | 20051010 |
| IN 2005CN02934 | A | 20070608 | IN | 2005-CN2934 | 20051109 |
| PRIORITY APPLN. INFO. | : | | EP | 2003-100972 | 20030410 |
| | | | WO | 2004-EP50403 | 20040401 |

GΙ

AB Fluorescent diketopyrrolopyrroles I [R1, R2 = (halo-substituted) C1-25 alkyl, (C1-4 alkyl-substituted) allyl, cycloalkyl, (substituted) phenyl-cycloalkyl condensed group, alkenyl, cycloalkenyl, alkynyl, haloalkyl, haloalkenyl, haloalkynyl, ketone or aldehyde group, ester group, carbamoyl, silyl group, siloxanvl, (substituted) arvl, (substituted) heteroarvl, or CR3R4(CH2)mA3; m = 0-4; R3, R4 = H, C2-4 alkyl, or (substituted) Ph; A1, A1 = 5- or 6-membered heterocyclic ring containing 1-3 heteroatoms selected from N,O, and S] are prepared for use as quest and host chromophores in electroluminescent compns., with the absorption spectrum of the guest chromophore overlapping the fluorescent emission spectrum of the host chromophore and the photoluminescence emission peak of the host chromophore being 500-720 nm. A typical I was manufactured by reaction of 27.7 g 5-bromo-2-cyanopyridine 20 h at 100-110° with 16.2 g diisopropyl succinate in tert-amyl alc., and reaction of 2 g intermediate 21 h with 2.4 g BuI in NMP in the presence of tert.-BuOK.

MSTR 1

= CH2CH=CH2

G13 = pyridyl (opt. substd.)

Patent location: claim 1

Note: substitution is restricted Note: also incorporates claim 11

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS 5 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L7 ANSWER 1 OF 40 MARPAT COPYRIGHT 2008 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 141:351424 MARPAT Full-text

TITLE: Fluorescent diketopyrrolopyrroles
INVENTOR(S): Yamamoto, Hiroshi; Dan, Norihisa

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| | PA: | TENT : | | | KI | ND | | | | | | | | | DATE | | | | |
|--------|-----|--------|------|-----|-------|-----|------|------|-----|-----|------|------|-------|-----|------|------|-----|-----|----|
| | WO | 2004 | 0900 | |
A | 1 | | 1021 | | | | | P504 | | 2004 | 0401 | | | |
| | | W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | |
| | | | CN. | co, | CR. | CU, | CZ, | DE. | DK, | DM, | DZ, | EC. | EE, | EG, | ES. | FI. | GB, | GD, | |
| | | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | |
| | | | LK, | LR, | LS, | LT, | LU, | LV, | MA. | MD, | MG, | MK, | MN, | MW. | MX, | MZ, | NA, | NI, | |
| | | | NO. | NZ, | OM, | PG, | PH. | PL, | PT. | RO, | RU, | SC. | SD, | SE, | SG, | SK, | SL, | SY, | |
| | | | | | | | | | | | | | | | YU, | | | | |
| | | RW: | | | | | | | | | | | | | ZM, | | | | |
| | | | | | | | | | | | | | | | CZ, | | | | |
| | | | | | | | | | | | | | | | PT, | | | | |
| | | | | | | | | | | | | | | | ML, | | | | |
| | | | TD, | | , | , | , | , | , | , | , | , | - 2.7 | , | , | , | , | | |
| | EP | 1611 | | | А | 1 | 2006 | 0104 | | E | P 20 | 04-7 | 2505 | 1 | 2004 | 0401 | | | |
| | | | | | | | | | | | | | | | NL, | | MC. | PT. | |
| | | | | | | | | | | | | | | | EE, | | | | HR |
| | CN | 1771 | | | | | 2006 | | | | | | | | 2004 | | , | ~, | |
| | | 2006 | | | | | | | | | | | | | 2004 | | | | |
| | | 2007 | | | | | | | | | | | | | | | | | |
| | | 2005 | | | | | | | | | | | | | 2005 | | | | |
| | | 2005 | | | | | | | | | | | | | 2005 | | | | |
| PRIOR | | | | | | | 2007 | 0000 | | | | | 0097 | | 2003 | | | | |
| 21.101 | | | | | • • | | | | | | | 04-E | | | 2003 | | | | |

G.

AB Fluorescent diketopyrrolopyrroles I [R1, R2 = (halo-substituted) C1-25 alkyl, (C1-4 alkyl-substituted) allyl, cycloalkyl, (substituted) phenyl-cycloalkyl condensed group, alkenyl, cycloalkenyl, alkynyl, haloalkyl, haloalkynyl, ketone or aldehyde group, ester group, carbamoyl, silyl group, siloxanyl, (substituted) aryl, (substituted) heteroaryl, or CR3R4(CR2)mA3; m = 0-4; R3, R4 = H, C2-4 alkyl, or (substituted) Ph; Al, Al = 5- or 6-membered heterocyclic ring containing 1-3 heteroatoms selected from N,O, and S] are prepared for use as guest and host chromophores in electroluminescent compns.,

with the absorption spectrum of the guest chromophore overlapping the fluorescent emission spectrum of the host chromophore and the photoluminescence emission peak of the host chromophore being 500-720 nm. A typical I was manufactured by reaction of 27.7 g 5-bromo-2-cyanopyridine 20 h at 100-110° with 16.2 g diisopropyl succinate in tert-amyl alc., and reaction of 2 q intermediate 21 h with 2.4 q BuI in NMP in the presence of tert.-BuOK.

MSTR 1

G1 = CH2CH=CH2

G13 = pyridyl (opt. substd.)

Patent location:

Note: substitution is restricted Note: also incorporates claim 11

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 40 MARPAT COPYRIGHT 2008 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 128:181675 MARPAT Full-text

Correction of: 128:76655

TITLE: Diketopyrrolopyrrole derivatives and manufacture

thereof, manufacture of coating materials containing

the same, and reducing pigmented organic polymer

solutions viscosity by using the same

Hendi, Shiyakumar Basalingappa

INVENTOR(S): PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent.

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA' | TENT | NO. | | KI | ND | DATE | | | API | PLICATION N | O. DATE |
|---------|-------|------|-------|-----|-----|-------|-----|-----|-----|-------------|-------------|
| | 8116 | | | A: | | 19971 | | | EP | 1997-81032 | 4 19970527 |
| | 8116 | 25 | | В | 1 | 20020 | 417 | | | | |
| | R: | CH, | DE, | ES, | FR, | GB, | IT, | LI, | NL | | |
| CA | 2206 | 756 | | A. | 1 | 19971 | 205 | | CA | 1997-22067 | 56 19970603 |
| CN | 1171 | 402 | | A | | 19980 | 128 | | CN | 1997-11296 | 1 19970604 |
| CN | 1067 | 395 | | В | | 20010 | 620 | | | | |
| JP | 1008 | 1687 | 7 | A | | 19980 | 331 | | JP | 1997-14756 | 5 19970605 |
| BR | 9703 | 467 | | A | | 19981 | 006 | | BR | 1997-3467 | 19970605 |
| PRIORIT | Y APE | LN. | INFO. | : | | | | | US | 1996-19138 | P 19960605 |
| | | | | | | | | | US | 1996-27469 | P 19960926 |
| | | | | | | | | | US | 1996-27470 | P 19960926 |

AB The title compds. are I [A1, A2 = aryl; B1, B2 = organic group] prepared from I (B1, B2 = 0H) with or without isolation. 1,4-Diketo-3,6-diphenylpyrrolo[3,4-c]pyrrole, quinacridone, and paraformaldehyde in concentrated sulfuric acid gave I (A1 = A2 = Ph; Q = quinacridinyl).

MSTR 1

G1 = pyridyl Patent location: claim 1

L7 ANSWER 3 OF 40 MARPAT COPYRIGHT 2008 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 123:146701 MARPAT Full-text

TITLE: 1,4-diketopyrrolo[3,4-c]pyrroles, their preparation

and their use

INVENTOR(S): Zambounis, John; Hao, Zhimin; Iqbal, Abul

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|----------|---------------|-----------------|----------|
| EP 648770 | A2 | 19950419 | EP 1994-810580 | 19941004 |
| EP 648770 | A3 | 19950531 | | |
| EP 648770 | B1 | 20000517 | | |
| R: BE, CH | , DE, FR | , GB, IT, LI, | NL | |
| US 5484943 | A | 19960116 | US 1994-319406 | 19941006 |
| CA 2117865 | A1 | 19950414 | CA 1994-2117865 | 19941011 |
| JP 07188234 | A | 19950725 | JP 1994-246632 | 19941013 |
| JP 3596915 | B2 | 20041202 | | |
| EP 690057 | A1 | 19960103 | EP 1995-810412 | 19950620 |

| EP | | B1 | | | | |
|---------|----------|------------|----------|----|--------------|----------|
| | | DE, FR, GB | | | | |
| | 690058 | | | EP | 1995-810413 | 19950620 |
| EP | 690058 | B1 | 19990908 | | | |
| | R: CH, | DE, FR, GB | , IT, LI | | | |
| EP | 690059 | A1 | 19960103 | EP | 1995-810414 | 19950620 |
| EP | 690059 | B1 | 19990908 | | | |
| | R: CH, | DE, FR, GB | , IT, LI | | | |
| US | 5591865 | A | 19970107 | US | 1995-493853 | 19950622 |
| US | 5646299 | A | 19970708 | US | 1995-493776 | 19950622 |
| US | 5650520 | A | 19970722 | US | 1995-493516 | 19950622 |
| CA | 2152744 | A1 | 19951230 | CA | 1995-2152744 | 19950627 |
| CA | 2152745 | A1 | 19951230 | CA | 1995-2152745 | 19950627 |
| CA | 2152748 | A1 | 19951230 | CA | 1995-2152748 | 19950627 |
| JP | 08020731 | A | 19960123 | JP | 1995-163153 | 19950629 |
| JP | 3637105 | B2 | 20050413 | | | |
| JP | 08027391 | A | 19960130 | JP | 1995-163151 | 19950629 |
| JP | 3645314 | B2 | 20050511 | | | |
| JP | 08048908 | A | 19960220 | JP | 1995-163152 | 19950629 |
| JP | 3645315 | B2 | 20050511 | | | |
| US | 5616725 | A | 19970401 | US | 1995-541004 | 19951011 |
| PRIORIT | APPLN. I | NFO.: | | CH | 1993-3079 | 19931013 |
| | | | | CH | 1994-2074 | 19940629 |
| | | | | CH | 1994-2075 | 19940629 |
| | | | | | 1994-2076 | 19940629 |
| | | | | | 1994-319406 | 19941006 |
| | | | | | | |

GI

AB The pyrrolopyrrolediones (I; A, Q = aromatic group; X = H, RO2C; Z = CO2R, where R = organic group) are obtained for use as UV-fluorescent pigments. Thus, 1,4-diketo-3,6-diphenylpyrrolo[3,4-c]pyrrole was treated with di-tert-Bu carbonate to give I (A = Q = Ph; X = Z= tert-butoxycarbonyl).

MSTP 1

Patent location: claim 1

Note: substitution is restricted

L7 ANSWER 4 OF 40 MARPAT COPYRIGHT 2008 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 123:83351 MARPAT Full-text

TITLE: Preparation of electrochromic diketopyrroles for

electrochromic display devices Mizuguchi, Jin; Iqbal, Abul; Giller, Gerald

INVENTOR(S): PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Ger. Offen., 10 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE DE 4435211 A1 19950427 DE 1994-4435211 19940930 PRIORITY APPLN. INFO.: CH 1993-2978 19931004 GT

AB The title compds. [I; Q1 = (un)substituted quaternary N-heteroarom.-bound hydrocarbon; Q2 = Q1, (un) substituted aryl; R1, R2 = H, alkyl, haloalkyl, cycloalkyl, (un)substituted Ph, (un)substituted PhCH2, etc.; X = mono-basic acid anion; n = 1, 2], useful in electrochromic display devices, are prepared Thus, diketopyrrole, II, was reacted with di-Me sulfate, producing an electrochromic salt, III, which, in an electrochromic display device with K4Fe(CN)6 and Na hypophosphite at 1.5V for 1 s, demonstrated a contrast ratio (560 nm) of 8 and a useable lifetime without contrast reduction of >1000 cycles.

MSTP 1

G1 = alkylcarbonyl <containing 1-14 C> G5 = 15

1⊊6 ● G16

G6 = 29

G12 = 22

296 • G16

Patent location: claim

Note: substitution is restricted

L7 ANSWER 5 OF 40 MARPAT COPYRIGHT 2008 ACS on STN DUPLICATE 5

CODEN: PIXXD2

ACCESSION NUMBER: 113:68456 MARPAT Full-text

TITLE: Optical memory devices containing color changeable

dyes, and dyes therefor
INVENTOR(S): Lanchals, Heinz; Potrawa, Th

INVENTOR(S): Langhals, Heinz; Potrawa, Thomas
PATENT ASSIGNEE(S): Riedel-de Haen A.-G., Germany

SOURCE: PCT Int. Appl., 96 pp.

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PA: | TENT | | | KI | ND | DATE | | | | PLICATION NO. | DATE |
|-------|-----|------|------|------|-----|-----|------|------|---|----|---------------|----------|
| | WO | 9001 | | | A | 1 | 1990 | | | WO | 1989-EP866 | 19890724 |
| | | W: | JP, | US | | | | | | | | |
| | | RW: | CH, | DE, | FR, | GB, | , NL | | | | | |
| | DE | 3901 | 988 | | A | 1 | 1990 | 0201 | | DE | 1989-3901988 | 19890124 |
| | DE | 3908 | 312 | | A | 1 | 1990 | 0927 | | DE | 1989-3908312 | 19890314 |
| | EP | 4267 | 17 | | A | 1 | 1991 | 0515 | | EP | 1989-908407 | 19890724 |
| | EP | 4267 | 17 | | В | 1 | 1996 | 0424 | | | | |
| | | R: | CH, | DE, | FR, | GB, | LI, | NL | | | | |
| | JP | 0450 | 0935 | | Т | | 1992 | 0220 | | JP | 1989-507776 | 19890724 |
| | US | 5354 | 869 | | A | | 1994 | 1011 | | US | 1991-640367 | 19910129 |
| PRIOR | RIT | APP | LN. | INFO | . : | | | | | DE | 1988-3825943 | 19880729 |
| | | | | | | | | | | DE | 1989-3901988 | 19890124 |
| | | | | | | | | | | DE | 1989-3908312 | 19890314 |
| | | | | | | | | | | DE | 1988-3808312 | 19890314 |
| | | | | | | | | | | WO | 1989-EP866 | 19890724 |
| | | | | | | | | _ | _ | | | |

AB The dyes with ≥2 different color forms, one of which can be changed to the other by supplying energy, are described which are used as storage media in optical memories. The dyes are solid state fluorescent dyes. Thus, 3,6bis(2'-methoxypheny1)-2,5-dihydropyrrolo(3,4-c)pyrrole-1,4-dione was prepared

MSTP 1

G4 = pyridyl (opt. substd.) claim 1

Patent location:

L7 ANSWER 6 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 144:138473 MARPAT Full-text

TITLE: Fluorescent quinacridones and compositions containing

them and their uses

INVENTOR(S): Yamamoto, Hiroshi; Dan, Norihisa; Van der Schaaf, Paul

Adriaan

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| | | | | |
| WO 2006003090 | A1 | 20060112 | WO 2005-EP52841 | 20050620 |

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM,
             KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
     EP 1769048
                      A1 20070404
                                         EP 2005-753878 20050620
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
     CN 1977029
                           20070606
                                          CN 2005-80021864 20050620
     KR 2007043810
                      Α
                           20070425
                                          KR 2007-702224
                                                          20070129
PRIORITY APPLN. INFO.:
                                          EP 2004-103025
                                                           20040629
                                           WO 2005-EP52841 20050620
```

AB Fluorescent quinacridone derive. and guest-host chromophore compns. comprising them in conjunction with diketopyrrolopyrrole host chromophores are described. The use of the derivs for coloring a high mol. weight organic material, as fluorescent tracers, in color changing media, in solid-state dye lasers, electroluminescent lasers and in electroluminescent devices is also described.

MSTP 2

7621-7639

$$G12 = 764$$

7832-7859

G22 = 800-8 803-765



Patent location: claim 7

Note: also incorporates claim 10

Note: additional ring formation also claimed

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 142:155935 MARPAT Full-text

TITLE: Processes for the preparation of furopyrroles and

diketopyrrolopyrroles (DPPs) via microwave-assisted cyclocondensations of acylpyrrolecarboxylate derivatives, intramolecularly or with nitriles

INVENTOR(S): Riggs, Richard Lewis; Westwood, Nicholas James; Smith,

David MacDonald; Morton, Colin

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz. SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA1 | ENT : | NO. | | KI | AD. | DATE | | | Al | PPLI | CATI | N NC | ٥. | DATE | | | |
|-----|-------|------|-----|-----|-----|------|------|-----|-----|------|--------|------|-----|------|------|-----|-----|
| | | | | | | | | | | | | | | | | | |
| WO | 2005 | 0054 | 30 | A: | 2 | 2005 | 0120 | | W | 20 | 04-E | P512 | 59 | 2004 | 0628 | | |
| WO | 2005 | 0054 | 30 | A. | 3 | 2005 | 0616 | | | | | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, |
| | | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW |
| | RW: | BW, | GH, | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, |
| | | ΑZ, | BY, | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, |
| | | EE, | ES, | FΙ, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MC, | NL, | PL, | PT, | RO, | SE, |
| | | SI, | SK, | TR, | BF, | BJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, |
| | | SN, | TD, | TG | | | | | | | | | | | | | |
| ΑU | 2004 | 2558 | 63 | A. | 1 | 2005 | 0120 | | A) | J 20 | 04 - 2 | 5586 | 3 | 2004 | 0628 | | |

```
EP 1641802
                    A2 20060405
                                        EP 2004-766084
                                                        20040628
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
    CN 1816553
                     Α
                          20060809
                                        CN 2004-80019155 20040628
    US 2007100135
                     A1
                         20070503
                                        US 2005-561393 20051219
    IN 2006CN00451
                          20070817
                                        IN 2006-CN451
                                                        20060203
                     Α
PRIORITY APPLN. INFO.:
                                        EP 2003-405507
                                                        20030707
                                        WO 2004-EP51259 20040628
```

OTHER SOURCE(S): CASREACT 142:155935

GI

AB

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The invention relates to a process for the preparation of furopyrroles I,

comprising (a) heating a compound II under microwave irradiation, optionally in the presence of an inert solvent [wherein Al and A2 are C1-C18 alkvl, C2-C18 alkenyl, C2-C18 alkynyl, C5-C8 cycloalkyl, C5-C8 cycloalkenyl, aryl, or heteroaryl; A3 is H, C1-C18 alkyl, cyanomethyl, Ar3 , -CR30R31-(CH2)m-Ar3, or -Y-R32, wherein R30 and R31 independently stand for H or C1-C4 alkyl, or Ph which can be substituted up to three times with C1-C4 alkyl; Ar3 is aryl, C5-C8 cycloalkyl, C5-C8 cycloalkenyl, or heteroaryl, which can be substituted one to three times with C1-C8 alkyl, C1-C8 alkoxy, halogen, or Ph, which can be substituted with C1-C8 alkyl or C1-C8 alkoxy 1-3 times; m is 0, 1, 2, 3, or 4; R is C1-C18 alkyl, in particular C1-C4 alkyl, aryl, in particular Ph, or aralkyl, in particular benzyl, which can be substituted one to three times with C1-C8 alkyl, C1-C8 alkoxy, or halogen; Y is C(O), C(O)O, C(O)NH, SO2NH, or SO2; and R32 is C1-C18 alkvl, Ar3, or aralkvll. Claims also cover diketopyrrolopyrroles (DPPs) III [A4 = H], the preparation of III [A4 = C1-C18 alkyl or Ar3] by reaction of I with primary amines A4-NH2, and an addnl. preparation of III [A4 = H]. I can be obtained in high yield and high purity. The microwave-assisted process, optionally in the presence of an inert solvent, is rapid and economical. Previously, WO03022848 disclosed a process for the preparation of I, comprising heating a compound II in an inert solvent, such as aromatic solvents, like biphenyl, para-, meta- or orthoterphenyl, dibenzyltoluene, α -methyl- or β - methylnaphthalene, cyclic carbonates like 1,3-dioxolan-2-one, ketones like acetophenone or benzophenone, Y-butyrolactone, and ethylene glycols like Phe-Cellosolve or Bu-Cellosove, or mixts. thereof, in particular mixts. of di- and triaryl ethers (Dowtherm A). It was discovered that I can be obtained in higher yield by carrying out the above reaction under microwave radiation. The yield of the desired ring closure reaction, e.g., of Et 4-benzoyl-4,5-dihydro-5-oxo-2-phenylpyrrole-3carboxylate (IV) to give 3,6-diphenylfuro[3,4-c]pyrrole-1,4-dione (V), is, for example, increased from 40% to 86% by microwave assistance. Moreover, the preparation of the latter lactone (a versatile DPP precursor) requires less time (1-10 min) under microwave irradiation, whereas it takes 60 h when conducted without microwave radiation (conventional method). In addition, the solvent can be omitted in the microwave-assisted ring closure, which makes the process even more cost-effective. For instance, 0.296 mmol IV was irradiated with microwave radiation at 2-45 GHz and forward power 300 W without solvent, heating to 250° for 10 min. The crude product V was allowed to cool, triturated, filtered, and washed with MeOH (86% yield). The DPP compound VI was prepared in 52% yield by condensation of the corresponding lactone (i.e., an analog of V) with PhNH2 in the presence of CF3CO2H and DCC at room temperature Finally, 5-oxo-4,5-dihydrofuran-3-carboxylates react with primary amines to give corresponding pyrrole derivs., which then react with nitriles A2-CN to give compds. III [A4 = H].

G1 = pyridyl

H25-CN

G18 = 334

3134 G19

G19 = alkyl <containing 1-18 C> Patent location: claim 1

Note: also incorporates claim 2, formula III

L7 ANSWER 8 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 140:129773 MARPAT Full-text

TITLE: Polymerizable diketopyrrolopyrroles, their use in color filters and polymers prepared from these

compounds

INVENTOR(S): Adam, Jean-marie; De Keyzer, Gerardus

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND D | DATE | APPLICATION NO. | DATE |
|---------------|---------|-------------|---------------------|-----------------|
| | | | | |
| WO 2004009710 | A1 2 | 20040129 | WO 2003-EP7638 | 20030715 |
| W: AE, AG, | AL, AM, | AT, AU, AZ, | BA, BB, BG, BR, BY, | BZ, CA, CH, CN, |
| CO, CR, | CU, CZ, | DE, DK, DM, | DZ, EC, EE, ES, FI | GB, GD, GE, GH, |
| GM, HR, | HU, ID, | IL, IN, IS, | JP, KE, KG, KP, KR | KZ, LC, LK, LR, |
| LS, LT, | LU, LV, | MA, MD, MG, | MK, MN, MW, MX, MZ | NI, NO, NZ, OM, |
| PG, PH, | PL, PT, | RO, RU, SC, | SD, SE, SG, SK, SL | SY, TJ, TM, TN, |
| TR, TT, | TZ, UA, | UG, US, UZ, | VC, VN, YU, ZA, ZM | ZW |
| RW: GH, GM, | KE, LS, | MW, MZ, SD, | SL, SZ, TZ, UG, ZM | ZW, AM, AZ, BY, |
| KG, KZ, | MD, RU, | TJ, TM, AT, | BE, BG, CH, CY, CZ, | DE, DK, EE, ES, |

FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003257464 20040209 AU 2003-257464 20030715 A1 EP 1523528 A1 20050420 EP 2003-764989 20030715 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK A 20050914 CN 2003-817203 20030715 CN 1668709 JP 2005533839 T 20051110 JP 2004-522457 20030715 TW 269072 В 20061221 TW 2003-92119862 20030721 US 2005255391 US 2005-522212 A1 20051117 20050114 PRIORITY APPLN. INFO.: EP 2002-405640 20020722 WO 2003-EP7638 20030715

The invention relates to the preparation and use of polymerizable AB diketopyrrolopyrroles in color filters. In contrast to conventional pigments, the polymerizable diketopyrrolopyrroles do not tend to aggregate and, hence, show very good dispersibility. Color filters prepared by using the polymerizable diketopyrrolopyrroles have high transparency and pure hue. In an example, the N atoms of a diketopyrrolopyrrole were treated with 6chlorohexanol to give the bis(6-hydroxyhexyl) derivative, which was then converted to the red dimethacrylate ester.

MSTR 1

G1 = 18

18(0)-0-G10

= pvridvl

Patent location:

claim 1

Note: oxo formation and heteroatom interruption in G24

and G26 also claimed

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 141:61865 MARPAT Full-text

TITLE: Diketopyrrolo[3,4-c]pyrroles and their organic

electroluminescent devices showing good durability

INVENTOR(S): Yauchi, Hiroyuki; Onikubo, Shunichi PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

 GI

PRIORITY APPLN. INFO.:

AB The pyrroles are I (A, B = electron-withdrawing group; R1, R2 = alkyl, aryl, heterocyclyl). The devices emit light from yellow to red with high intensity.

MSTR 1

G1 = 15

15(0)-G3

G2 = 4-pyridyl

Patent location: claim

Note: additional ring formation also disclosed

L7 ANSWER 10 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 140:411989 MARPAT Full-text

ACCESSION NUMBER: 140:411989 MARPAT Full-text
TITLE: Use of latent pigments for ha

MITLE: Use of latent pigments for hair coloring, composition containing the aforementioned pigments and methods for

Lagrange, Alain; Kravtchenko, Sylvain; Greaves, Andrew

using them

INVENTOR(S):

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Fr. Demande, 40 pp.
CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------|--------|---------------|---------------------|-----------------|
| | | | | |
| FR 2847162 | A1 | 20040521 | FR 2002-14535 | 20021120 |
| FR 2847162 | B1 | 20050218 | | |
| EP 1426036 | A1 | 20040609 | EP 2003-292849 | 20031118 |
| R: AT, BE, | CH, DE | , DK, ES, FR, | GB, GR, IT, LI, LU, | NL, SE, MC, PT, |
| IE, SI, | LT, LV | , FI, RO, MK, | CY, AL, TR, BG, CZ, | EE, HU, SK |
| US 2004226111 | A1 | 20041118 | US 2003-715839 | 20031119 |
| US 7326255 | B2 | 20080205 | | |
| JP 2004168779 | A | 20040617 | JP 2003-390929 | 20031120 |
| PRIORITY APPLN. INFO | . : | | FR 2002-14535 | 20021120 |
| | | | US 2003-502655P | 20030915 |

AB A latent, soluble pigment for dyeing of keratinous fibers is disclosed wherein the soluble pigment in fibers is transformed into insol. pigment in water by chemical, thermal, or photochem. process. The pigment has formula $A(B) \times A(B) \times A(B)$ MeCOFmYnF'mZ), with Z representing a hydrosolubilizing cation Z+ or a polyethylene glycol residue, Y is a heteroatom, F and F' are a C1-14 linear or branched alkylene which can contain heteroatoms and can be substituted by one or more hydroxy, amino, or halogen group. Formulation of a hair dye containing a pigment breaking down to dipyrrolidinonylidene at pH>7 and producing indigo color is disclosed.

MSTP 1A

G1___G2

= 457

$$G2 = 3$$
 $g(0) - G5 - G4 - G3$

G2

G26 = pyridyl Patent location:

Note: Note: claim 2 substitution is restricted additional heteroatom interruption in G5 and G7 also claimed

L7 ANSWER 11 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 138:255221 MARPAT Full-text

TITLE: Process for the preparation of diketopyrrolopyrroles

(DPPs) from furopyrrolediones and primary amines.
INVENTOR(S): Morton, Colin; Smith, David MacDonald; Ruffieux,

Vincent

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

| | PA: | TENT : | NO. | | KIND DATE | | | | | | | ο. | DATE | | | | | |
|-------|------------------|--------|------|-----|-----------|-----|------|------|-----|-----|------|---------|------|-----|------|------|-----|-----|
| | | | | | | | | | | | | | | | | | | |
| | | 2003 | | | | | | | | W | 20 | 02-E | P979 | 2 | 2002 | 0903 | | |
| | WO | 2003 | | | | - | | | | | | | | | | | | |
| | | W: | | | | | ΑT, | | | | | | | | | | | |
| | | | | | | | DE, | | | | | | | | | | | |
| | | | | | | | IL, | | | | | | | | | | | |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NZ, | OM, | PH, |
| | | | PL, | PΤ, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ΤJ, | TM, | TN, | TR, | TT, | ΤZ, |
| | | | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | | | | | | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | SK, | TR, | BF, | ВJ, | CF, |
| | | | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | |
| | AU | 2002 | 3426 | 33 | A | 1 | 2003 | 0324 | | A | J 20 | 02-3 | 4263 | 3 | 2002 | 0903 | | |
| | EP | 1425 | 282 | | A | 2 | 2004 | 0609 | | E | P 20 | 02-7 | 7929 | 1 | 2002 | 0903 | | |
| | EP | 1425 | 282 | | B1 | | 2007 | 0321 | | | | | | | | | | |
| | | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | IE. | SI. | LT. | LV. | FI, | RO. | MK. | CY. | AL. | TR. | BG. | CZ. | EE. | SK | | |
| | CN | 1553 | 912 | | A | | 2004 | 1208 | | CI | N 20 | 02-8 | 1758 | 6 | 2002 | 0903 | | |
| | | 1553 | | | | | | | | | | | | | | | | |
| | | 2005 | | | | | | | | | | | | | | | | |
| | AT | 3210 | 49 | | Т | | 2006 | 0415 | | A' | T 20 | 02-7 | 7455 | 0 | 2002 | 0903 | | |
| | | 3574 | | | | | | | | | | | | | | | | |
| | | 2004 | | | | | | | | | | | | | | | | |
| | | 7326 | | | | | 2008 | | | | | | | - | | | | |
| | | 2004 | | | | | | | | 7. | a 20 | 04-1 | 106 | | 2004 | 0211 | | |
| PRIOR | | | | | | | 2001 | 1015 | | | | 01-8 | | | 2001 | | | |
| | ONIII ALLEN. INC | | | | | | | | | | | 01-8 | | | 2001 | | | |
| | | | | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | *** | 20 | 0 L - E | 1 | _ | 2002 | 0,00 | | |

GI

AB Title compds. [I; Al, A2 = alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl; A3 = H, alkyl, cyanomethyl, Ar3, CR30R31(CH2)mAr3, YR32; R30, R31 = H, alkyl, (substituted) Ph; Ar3 = (substituted) aryl, cycloalkyl, cycloalkenyl, heteroaryl; Y = CO, CONH, SOZNH, SOZ; R32 = alkyl, Ar3, aralkyl; A4 = alkyl, Ar3], were prepared by treatment of furopyrrolediones ([I]; variables as above) with A4NH2 (A4 as above). Thus, II (Al, A2 = Ph; A3 = CH2Ph) was stirred with DCC, PhNH2, and CF3CO2H in CH2Cl2 at 40° to give 16% I (Al, A2, A4 = Ph; A3 = CH2Ph).

MSTR 1

G1 = pyridyl G2 = CH2CN

G11 = alkyl <containing 1-18 C>

G25 = 359

389-G11

Patent location: claim 1

L7 ANSWER 12 OF 40 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 138:114835 MARPAT Full-text
TITLE: Organic electroluminescent material and organic

electroluminescent element

INVENTOR(S): Suda, Yasumasa

PATENT ASSIGNEE(S): Toyo Ink MFG. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------------------|------|----------|----------------------------------|----------|
| | | | | |
| JP 2003027049
PRIORITY APPLN INFO | . A | 20030129 | JP 2001-221016
JP 2001-221016 | 20010723 |
| | • | | 01 8001 881010 | 20010.20 |

GΙ

AB The invention refers to an organic electroluminescent material I [R1,2 = 0 or cyano-substituted N, where both R1 and R1 may not be 0; R3,4 = H, halo, alkyl, alkenyl, aryl, heterocyclic or COORT; R7 = alkyl, alkenyl, aryl or heterocyclic; R5,6 = aryl or heterocyclic].

MSTP 1

G1 = (up to 1) O G2 = 15

15(0)-0-G3

G4 = pyridyl

Patent location:

L7 ANSWER 13 OF 40 MARPAT COPYRIGHT 2008 ACS on STN

claim 1

ACCESSION NUMBER: 134:253732 MARPAT Full-text
TITLE: Substituted pyrrolo[2,3-c]pyrrole-1,4-diketone type

cubottuted pyriototic, cipyrtote i, i directore cipe

compounds and their single ring-opening derivatives

for colorants

INVENTOR(S): Iqbal, Abul; Hao, Zhimin; Yoshihara, Toshio; Ito,

Kiyoshi; Nakamura, Kazuhiko; Furukawa, Minoru
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding, Inc., Switz.; Dai

Nippon Printing Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Fatent
Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| | | | | |
| JP 2001081346 | A | 20010327 | JP 1999-240509 | 19990826 |

AB The colorants are prepared which have good dispersibility in organic solvents and are useful for coloring plastics, inks, coatings, etc.

MSTP 1

99(0)99----610

Patent location: claim 1

Note: substitution is restricted Note: also incorporates claim 10

L7 ANSWER 14 OF 40 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 134:229773 MARPAT Full-text

TITLE: Color filter for liquid crystal displays

INVENTOR(S): Yoshiwara, Toshio; İto, Kiyoshi; Nakamura, Kazuhiko;

Furukawa, Minoru

PATENT ASSIGNEE(S): Dai Nippon Printing Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
|----------------------|------|----------|-------------------------|
| | | | |
| JP 2001066410 | A | 20010316 | JP 1999-240390 19990826 |
| US 6656985 | B1 | 20031202 | US 2000-640175 20000817 |
| US 2004050294 | A1 | 20040318 | US 2003-642212 20030818 |
| US 7175948 | B2 | 20070213 | |
| PRIORITY APPLN. INFO | . : | | JP 1999-240390 19990826 |
| | | | JP 1999-240508 19990826 |
| | | | JP 1999-240510 19990826 |
| | | | US 2000-640175 20000817 |

AB The invention relates to a LCD color filter, a color layer of which contains a sp. pyrrolo[3, 4-c]pyrrole derivative therein formed on a translucent substrate to improve the spectral characteristics such as color purity, high transmittance, and high contrast.

G1 = pyridy1 G31 = 94

Patent location: claim 1

Note: substitution is restricted Note: also incorporates claim 10

L7 ANSWER 15 OF 40 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 134:18664 MARPAT Full-text

TITLE: Manufacture of calcined and colored pencil cores

INVENTOR(S): Kitasawa, Katsunori

PATENT ASSIGNEE(S): Mitsubishi Pencil Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA | TENT | NO. | | KIND DATE | | | | | Al | PPLI | CATI | ο. | DATE | | | | |
|---------|---------------------|---------|-----|-----------|------|------|------|-----|-----|------|--------|------|------|------|------|-----|-----|
| | | | | | | | | | _ | | | | | | | | |
| JP | 2000 | 3362 | 98 | A | | 2000 | 1205 | | J | P 19 | 99-1 | 4918 | 8 | 1999 | 0528 | | |
| WO | 2000 | 0733 | 94 | A | 1 | 2000 | 1207 | | W | 0 20 | 00-J | P313 | 8 | 2000 | 0516 | | |
| | W: | ΑE, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, |
| | | DE, | DK, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, |
| | | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, |
| | | MW, | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, |
| | | TR, TT, | | | UG, | US, | UZ, | VN, | YU, | ZA, | ZW, | AM, | AZ, | BY, | KG, | KZ, | MD, |
| | | RU, TJ, | | | , TM | | | | | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | SD, | SL, | SZ, | TZ, | UG, | ZW, | AT, | BE, | CH, | CY, | DE, |
| | | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, |
| | | CG, | CI, | CM, | GA, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | |
| AU | 2000 | 0443 | 39 | A | | 2000 | 1218 | | A | U 20 | 00 - 4 | 4339 | | 2000 | 0516 | | |
| DE | DE 10084661 | | | | | 2002 | 0508 | | D | E 20 | 00-1 | 0084 | 661 | 2000 | 0516 | | |
| US | US 6746524 | | | | | 2004 | 0608 | | U | S 20 | 01-9 | 7977 | 4 | 2001 | 1128 | | |
| PRIORIT | RIORITY APPLN. INFO | | | | | | | | J | P 19 | 99-1 | 4918 | 8 | 1999 | 0528 | | |
| | | | | | | | | | W | 0 20 | 00-J | P313 | 8 | 2000 | 0516 | | |
| | | | | | | | | | | | | | | | | | |

AB Title eraser-erasable cores, with good mech. strength and light resistance, are prepared by forming white or light-colored porous calcined bodies, filling the pores with organic solns. of XYm (X = color-developing group residue; Y = H, COOL, L = soluble group with at least one of Y = COOL; m = 1-8), and heating in order to convert XYm into pigments. A 0.57-mm porous calcined core (prepared from BN-containing PVC composition and perhydropolysilazane) with flexural modulus (Mf) of 250.5 MFa was soaked in 15% I-containing PhMe solution, left at room temperature for 24 h, and heated at 180° for 20 min to form a red core with Mf 252.1 MFa and 99.3% erasability.

MSTR 1

G1___G3

$$G1 = 603$$

15(0)-0-G2

G24 = pyridy1 Patent location: Note:

claim 1 substitution is restricted L7 ANSWER 16 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 133:325467 MARPAT Full-text

TITLE: Cosmetic make-up compositions comprising a

pyrrolopyrrole pigment INVENTOR(S): Simon, Jean-Christophe PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PA: | rent : | NO. | | KI | ND. | DATE | | | AP | PLI | CATI | и ис | ο. | DATE | | | |
|------|--------|---------|------|-----|-----|------|------|-----|-----|------|------|------|-----|------|------|-----|-----|
| EP | 1046 |
389 | | A1 | 1 | 2000 | 1025 | | EF | 20 | 00-4 | 0110 | 1 | 2000 | | | |
| EP | 1046 | 389 | | B1 | 1 | 2003 | 0813 | | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI, | RO | | | | | | | | | | |
| FR | 2792 | 526 | | A1 | 1 | 2000 | 1027 | | FF | 19 | 99-5 | 134 | | 1999 | 0422 | | |
| FR | 2792 | 526 | | B1 | 1 | 2001 | 0727 | | | | | | | | | | |
| BR | 2000 | 0012 | 32 | A | | 2001 | 0424 | | BF | 20 | 00-1 | 232 | | 2000 | 0418 | | |
| CA | 2306 | 337 | | A1 | 1 | 2000 | 1022 | | CA | . 20 | 00-2 | 3063 | 37 | 2000 | 0420 | | |
| CN | 1271 | 570 | | A | | 2000 | 1101 | | CN | 20 | 00-1 | 0609 | 0 | 2000 | 0420 | | |
| AT | 2469 | 14 | | T | | 2003 | 0815 | | AT | 20 | 00-4 | 0110 | 1 | 2000 | 0420 | | |
| ES | 2199 | 747 | | T3 | 3 | 2004 | 0301 | | ES | 20 | 00-4 | 0110 | 1 | 2000 | 0420 | | |
| US | 6372 | 202 | | B2 | 1 | 2002 | 0416 | | US | 20 | 00-5 | 5718 | 0 | 2000 | 0421 | | |
| JP | 2000 | 3360 | 15 | A | | 2000 | 1205 | | JF | 20 | 00-1 | 2212 | 8 | 2000 | 0424 | | |
| ORIT | APP | LN. | INFO | . : | | | | | FF | 19 | 99-5 | 134 | | 1999 | 0422 | | |
| | | | | | | | | | | | | | | | | | |

AB Cosmetic make-up compns. comprising orange pigments generating no free radicals, e.g. diketodiarylpyrrolopyrrole derivs., are disclosed (Markush structure given). A lipsticks contained polyethylene wax 14, sesame oil 78, a tert-Bu derivative of 1,4-diketo-3,6-diphenylpyrrolo[3,4-c]pyrrole 5, and titanium dioxide 3 q.

MSTP 1

PR

$$\text{G1-CH2} \xrightarrow{\text{G5}} \text{G5}$$

G5 = pyridyl

INVENTOR(S):

Patent location: claim 2

Note: substitution is restricted

REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 40 MARPAT COPYRIGHT 2008 ACS on STN 130:126360 MARPAT Full-text ACCESSION NUMBER: TITLE: Production of fine pigment dispersions Sieber, Werner; Hall-Goulle, Veronique PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| | | | | | KIND DATE | | | | | | | | | DATE | | | | |
|-------|-----------|-----------|------|------|-----------|-----|------|------|-----|-----|------|------|------|------|------|------|-----|----|
| | | | | | | | | | | - | | | | | | | | |
| | WO | 9901 | 511 | | A | 1 | 1999 | 0114 | | W | 0 19 | 98-E | P394 | 8 | 1998 | 0629 | | |
| | | W: | AL, | AM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE |
| | | | DK, | EE, | ES, | FI, | GB, | GE, | GH, | GM, | GW, | HU, | ID, | IL, | IS, | JP, | KE, | KG |
| | | | KP, | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX |
| | | | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | TT |
| | | | UA, | UG, | UZ, | VN, | YU, | ZW, | AM, | AZ, | BY, | KG, | KZ, | MD, | RU, | TJ, | TM | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | SD, | SZ, | UG, | ZW, | AT, | BE, | CH, | CY, | DE, | DK, | ES |
| | | | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI |
| | | | CM, | GA, | GN, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | |
| | AU | 9887 | 301 | | A | | 1999 | 0125 | | A) | U 19 | 98-8 | 7301 | | 1998 | 0629 | | |
| | EP | EP 993490 | | | | 1 | 2000 | 0419 | | E | P 19 | 98-9 | 3866 | 9 | 1998 | 0629 | | |
| | EP 993490 | | | | В | 1 | 2003 | 0226 | | | | | | | | | | |
| | | R: | CH, | DE, | FR, | GB, | IT, | LI | | | | | | | | | | |
| | JP | 2002 | 5142 | 63 | T | | 2002 | 0514 | | J | P 19 | 99-5 | 0629 | 9 | 1998 | 0629 | | |
| | US | 6001 | 168 | | A | | 1999 | 1214 | | U | S 19 | 98-1 | 0753 | 1 | 1998 | 0630 | | |
| | US | 6071 | 989 | | A | | 2000 | 0606 | | U: | S 19 | 98-1 | 0754 | 5 | 1998 | 0630 | | |
| | US | 6165 | 681 | | A | | 2000 | 1226 | | U: | S 19 | 99-3 | 7618 | 8 | 1999 | 0817 | | |
| | US | 6211 | 347 | | В | 1 | 2001 | 0403 | | U: | S 20 | 00-5 | 3991 | 2 | 2000 | 0330 | | |
| PRIOR | RIT | APP: | LN. | INFO | . : | | | | | C | H 19 | 97-1 | 573 | | 1997 | 0630 | | |
| | | | | | | | | | | C | H 19 | 97-2 | 896 | | 1997 | 1216 | | |
| | | | | | | | | | | C | H 19 | 97-8 | 22 | | 1997 | 0409 | | |
| | | | | | | | | | | C | н 19 | 97-8 | 23 | | 1997 | 0409 | | |
| | | | | | | | | | | U | s 19 | 98-5 | 7090 | | 1998 | 0408 | | |
| | | | | | | | | | | W | 0 19 | 98-E | P394 | 8 | 1998 | 0629 | | |
| | | | | | | | | | | U | s 19 | 98-1 | 0754 | 5 | 1998 | 0630 | | |
| | | | | | | | | | | | | | | | | | | |

The title dispersions, with high stability and good transparency, are prepared AB by treating mixts. of latent pigments and polymers with chems., heat, or light before or after addition of a solvent. The dispersions are especially useful in the production of color filters. A latent pyrrolopyrrole derivative pigment was mixed (200 mg) in dioxane with 1 g maleic anhydride-octadecene copolymer (mol. weight 50,000), dried at 60° in vacuo and then at 140°, dispersed in dioxane, the polymer was dissolved using ultrasound, and the dispersion was mixed with 700 uL morpholine and 20 mL H2O and dried in vacuo to give a red, homogeneous, transparent dispersion with viscosity 2.16 mPa-s at 25° which showed no precipitation after several days.

MSTP 18

G1----G7

G7 = 17

15(0)-0-65

G29 = pyridyl

Patent location: claim 7

Note: substitution is restricted

REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 40 MARPAT COPYRIGHT 2008 ACS on SIN ACCESSION NUMBER: 130:168757 MARPAT Full-text

TITLE: Polymerizable diketopyrrolopyrroles INVENTOR(S): Eldin, Sameer

PATENT ASSIGNEE(S):

Ciba Specialty Chemicals Holding Inc., Switz. SOURCE: Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PA: | ENT | NO. | | KI | 1D | DATE | | | AF | PLI | CATI | ои и | ٥. | DATE | | | |
|------|---------------------|------------|------|-----|-----|-----------|------|------|-----|-----|------|------|------|------|------|------|-----|----|
| | | | | | | | | | | | | | | | | | | |
| | EP | 8947 | 98 | | A: | 1 | 1999 | 0203 | | EF | 19 | 98-8 | 1070 | 3 | 1998 | 0721 | | |
| | EP | 8947 | 98 | | B: | 1 | 2005 | 1109 | | | | | | | | | | |
| | | R: AT, BE, | | | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PΤ |
| | | | IE, | SI, | LT, | LV, | FI, | RO | | | | | | | | | | |
| | US | 5919 | | A | | 1999 | 0706 | | US | 19 | 98-1 | 1943 | 4 | 1998 | 0720 | | | |
| | CA | 2244 | 316 | | A: | 1 1999013 | | | | CA | . 19 | 98-2 | 2443 | 16 | 1998 | 0728 | | |
| | TW | 4026 | 02 | | В | | 2000 | 0821 | | TW | 19 | 98-8 | 7112 | 321 | 1998 | 0728 | | |
| | JP | 1109 | 2477 | | A | | 1999 | 0406 | | JF | 19 | 98-2 | 1362 | 8 | 1998 | 0729 | | |
| | US | 6107 | 491 | | A | | 2000 | 0822 | | US | 19 | 99-2 | 3764 | 0 | 1999 | 0126 | | |
| PRIO | PRIORITY APPLN. INF | | | | | | | | | CH | 19 | 97-1 | 822 | | 1997 | 0730 | | |
| | | | | | | | | | | US | 19 | 98-1 | 1943 | 4 | 1998 | 0720 | | |
| | | | | | | | | | | | | | | | | | | |

Ι

GΙ

$$\mathsf{CH}_2 = \mathsf{CH} + \mathsf{CH}_2 \mathsf{N} \mathsf{CH}_2 - \mathsf{CH} = \mathsf{CH}_2 \mathsf{C$$

AB The title compds., with specified structures and giving polymers resisting O and UV, are prepared by the reaction of diketopyrrolopyrroles containing NH groups with organic halides of specified structure in the presence of bases. Adding 0.150 mol 4-(chloromethyl)styrene over 30 min to 0.05 mol Pigment Red 3367E and 0.150 mol RZCO3 stirred in DMF containing hydroquinone at 120-125° and stirring at that temperature for 160 min gave 92.1% diketopyrrolopyrrole I. Photopolymn. of the products with the monomer Laromer EA 81 is exemplified.

MSTP 1

G1 = CH2

G14 = alkyl <containing 1-6 C>

G16 = pyridyl G23 = 11

161-164-65-169

Patent location: claim 1

Note: substitution is restricted

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 129:176908 MARPAT Full-text

TITLE: Soluble chromophores having improved solubilizing

groups and their use

INVENTOR(S): Hall-Goulle, Veronique; Bize, Aline

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

LANGUAGE: En-FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA: | TENT | NO. | | KII | 4D | DATE | | | Al | PPLI | CATI | N NC | o. 1 | DATE | | | |
|-----|------|-----|-----|-----|-----|------|------|-----|-----|------|------|------|------|------|------|-----|-----|
| | | | | | | | | | - | | | | | | | | |
| WO | 9832 | 802 | | A: | 1 | 1998 | 0730 | | W |) 19 | 98-E | P248 | | 1998 | 0117 | | |
| | W: | AL. | AM. | AT. | AU. | AZ. | BA. | BB. | BG. | BR. | BY. | CA. | CH. | CN. | CU. | CZ. | DE. |

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,

```
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
            UA, UG, UZ, VN, YU, ZW
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
            FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
            GA, GN, ML, MR, NE, SN, TD, TG
    CA 2275965
                    A1 19980730
                                        CA 1998-2275965 19980117
    AU 9862109
                     Α
                          19980818
                                        AU 1998-62109
                                                         19980117
    EP 968250
                     A1 20000105
                                        EP 1998-904092
                                                        19980117
    EP 968250
                    B1 20010418
        R: CH, DE, FR, GB, IT, LI
    JP 2001513119
                    T 20010828
                                         JP 1998-531549
                                                        19980117
                                         TW 1998-87100901 19980123
    TW 444051
                     В
                          20010701
    US 6274728
                    B1 20010814
                                        US 1999-465868 19991216
PRIORITY APPLN. INFO.:
                                         CH 1997-171
                                                         19970127
                                         WO 1998-EP248
                                                        19980117
                                         US 1998-13659
                                                         19980226
```

AB The colorants A(B)x (x = 1-8; A = radical of a chromophore of the quinacridone, anthraquinone, perylene, indigo, quinophthalone, indanthrone, isoindolinone, isoindoline, dioxazine, azo, phthalocyanine or diketopyrrolopyrrole series; B = H or solubilizing group) are obtained whereby A is bonded to x groups B via one or more hetero atoms, those hetero atoms being selected from the group consisting of N, O, and S and forming part of the radical A. The colorants are used in high-mol.-weight organic materials, thermo-, photo-, or chemo-sensitive recording materials, light-sensitive neg. or pos. resist compns., ink compns. for ink-jet printing, and color tapes for thermal transfer printing. The soluble chromophore derivs, can be converted to the underivatized form (B = H) by heating after they are incorporated into a substrate. Thus, bis(1,1-dimethy1-3,7-dioxa-1-hepty1) oxydicarbonate was prepared and used to treat C.I. Pigment Violet 37, giving the red tetrakis(1,1,-dimethyl-3,7- dioxa-1-heptyloxycarbonyl) derivative of C.I. Pigment Violet 37 in 65% yield; this pigment was used in a coating composition

MSTR 1B

G1-G16

G1 = 3/

G16 = 2

G(0)-0-G2-G6-G7

G18 = pvridvl

Patent location: claim 1

Note: also incorporates claim 7

Note: additional carbonyl, phenylene, and heteroatom

interruptions claimed

Note: substitution is restricted

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS 5 RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 40 MARPAT COPYRIGHT 2008 ACS on STN 128:309528 MARPAT Full-text ACCESSION NUMBER:

TITLE: Pigment granulation

INVENTOR(S): Balliello, Paolo; Brucker, Horst Olaf

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.; Balliello, Paolo; Brucker, Horst Olaf

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| | PATENT NO. | | | | KIND DATE | | | | | | CATI | | DATE | | | | |
|--------|------------------|---------|-----|-----|-----------|------|------|-----|-----|------|------|-------|------|------|------|-----|-----|
| | 9817 | | | | | 1998 | 0430 | | | | | | | 1997 | 1010 | | |
| | W: | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, |
| | | DK, | EE, | ES, | FI, | GB, | GE, | GH, | HU, | ID, | IL, | IS, | JP, | KE, | KG, | KP, | KR, |
| | | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NZ, |
| | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | TT, | UA, | UG, |
| | | US, | UZ, | VN, | YU, | ZW | | | | | | | | | | | |
| | RW: | GH, | KE, | LS, | MW, | SD, | SZ, | UG, | ZW, | AT, | BE, | CH, | DE, | DK, | ES, | FI, | FR, |
| | | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, |
| | | GN, | ML, | MR, | ΝE, | SN, | TD, | TG | | | | | | | | | |
| CA | 2265 | 2265520 | | | 1 | 1998 | 0430 | | CZ | A 19 | 97-2 | 2655 | 20 | 1997 | 1010 | | |
| AU | 9851 | 9851181 | | | | 1998 | 0515 | | Αl | J 19 | 98-5 | 1181 | | 1997 | 1010 | | |
| EP | 9343 | 934364 | | | 1 | 1999 | 0811 | | E | 9 | 97-9 | 4581 | 3 | 1997 | 1010 | | |
| EP | 9343 | 64 | | В | 1 | 2002 | 1204 | | | | | | | | | | |
| | R: | BE, | CH, | DE, | FR, | GB, | ΙT, | LI, | NL | | | | | | | | |
| CN | 1234 | 053 | | A | | 1999 | 1103 | | CI | 1 19 | 97-1 | 9898 | 4 | 1997 | 1010 | | |
| | 1085 | | | | | 2002 | | | | | | | | | | | |
| BR | 9713 | 272 | | A | | 2000 | 0328 | | BI | R 19 | 97-1 | 3272 | | 1997 | 1010 | | |
| JP | 2001 | 5027 | 30 | T | | 2001 | 0227 | | JI | 9 | 98-5 | 1890: | 2 | 1997 | 1010 | | |
| US | 6241 | 813 | | В | 1 | 2001 | 0605 | | U | 3 19 | 99-2 | 6949 | 8 | 1999 | 0329 | | |
| KR | 2000 | 0526 | 98 | A | | 2000 | 0825 | | K | R 19 | 99-7 | 0349 | 1 | 1999 | 0421 | | |
| US | US 2001006034 | | | A | 1 | 2001 | 0705 | | U | 3 20 | 01-7 | 8390: | 2 | 2001 | 0215 | | |
| US | US 6423132 | | | B. | 2 | 2002 | 0723 | | | | | | | | | | |
| RIORIT | RITY APPLN. INFO | | | . : | | | | | CI | 1 19 | 96-2 | 580 | | 1996 | 1022 | | |
| | | | | | | | | | W | 19 | 97-E | P560 | 3 | 1997 | 1010 | | |
| | | | | | | | | | U | 3 19 | 99-2 | 6949 | 8 | 1999 | 0329 | | |

AB Organic pigment granules with particle size 0.5-4 mm are prepared using a mixture of ≥90% organic pigment, 0-10% binder (such as Staybelite Resin), and 0-5% neutral emulsifier (such as Emulan OSN) which does not form ions and which dissolves to give a clear solution in water or a C1-4 alc. The mixture is pressed in a continuously operating apparatus consisting of at least one conveying device and a shaping section, and being constructed and operated with a throughput, such that the pressure in its shaping section does not exceed 10 bar. If desired, the cylindrical granules emerging from the dies are converted on a rotating device into ovoid or spherical granules, and the granulated product is dried at a temperature of -50 to +200° at ≤1 atmospheric The pigments have low dusting tendency and are easily incorporated into macromol. componens. An example using 3,6-bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-clyptrole-,1-dione was given.

MSTP 1

G1 = alkyl <containing 1-6 C>

G5 = pyridyl

Patent location: claim 5

Note: substitution is restricted

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 40 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 130:13986 MARPAT Full-text

TITLE: Process for preparing diketopyrrolopyrrole derivatives

INVENTOR(S): Hendi, Shivakumar Basalingappa

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corporation, USA

SOURCE: U.S., 10 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent

LANGUAGE: English

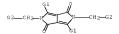
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------|------|----------|-----------------|----------|
| | | | | |
| US 5840907 | A | 19981124 | US 1997-870353 | 19970605 |
| US 5919945 | A | 19990706 | US 1998-119894 | 19980721 |
| PRIORITY APPLN. INFO |).: | | US 1997-870353 | 19970605 |

R_N N_R

AB Bis(hydroxymethyl)pyrrolopyrroles (I; R = CH2OH; R1, R2 = aryl) are prepared by reacting I (R = H; R1, R2 = aryl) with formaldehyde. I (R = CH2OH; R1, R2 = aryl) can be isolated or further reacted in a one pot synthesis to yield I (R = organyl; R1, R2 = aryl).



G1 = pyridyl

Patent location: claim 1

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 22 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 129:162886 MARPAT Full-text

ACCESSION NUMBER: 129:162886 MARPAT Full-text
TITLE: Viscosity reducing 1,4-diketo-3,6-diarylpyrrolo[3,4-

c]pyrrole derivatives

INVENTOR(S): Hendi, Shivakumar B.

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corporation, USA

SOURCE: U.S., 8 pp.

CODEN: USXXAM

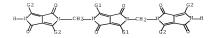
DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|----------|
| | | | | |
| US 5786487 | A | 19980728 | US 1997-938658 | 19970926 |
| PRIORITY APPLN. INFO. | : | | US 1997-938658 | 19970926 |

AB The title pyrrolopyrrole (DPP) derivs. are I (A, B = aryl), substituted by 0-6 mol SO3M/mol I, where M = H or a metal or ammonium cation, and show excellent rheol. enhancing properties for pigment dispersions, especially those containing quinacridones, DPPs and their solid solution pigments. Thus, 1,4-diketo-3,6-diphenylpyrrolo[3,4-clpyrrole (II) and paraformaldehyde in concentrated (96%) H2SO4 at .apprx.45° gave an intermediate which reacts with 2 mol II to qive a product sulfate, suitable for pigments for coatings.



G1 = pyridyl

Patent location: claim 1

Note: substitution is restricted

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 23 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 129:162885 MARPAT Full-text

TITLE: Viscosity reducing 1,4-diketo-3,6-diarylpyrrolo[3,4-

c]pyrrole derivatives INVENTOR(S): Hendi, Shivakumar B.

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corporation, USA

SOURCE: U.S., 8 pp.

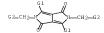
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|----------|
| | | | | |
| US 5785750 | A | 19980728 | US 1997-938656 | 19970926 |
| PRIORITY APPLN. INFO. | . : | | US 1997-938656 | 19970926 |
| GT | | | | |

AB The title pyrrolopyrrole (DPP) derivs. are I (QA = quinacridone radical, A, B = aryl), substituted by 0-6 mol So3M/mol I; where M = H or a metal or ammonium cation, and show excellent rheol enhancing properties for pigment dispersions, especially those containing quinacridones, DPPs and their solid solution pigments. Thus, 1,4-diketo-3,6-diphenylpyrrolo[3,4-c]pyrrole, quinacridone, and paraformaldehyde in concentrated (96%) HZSO4 at .apprx.45° gave I (A, B = Ph) sulfate, suitable for pigments for coatings.



G1 = pyridyl

Patent location: claim 1

Note: substitution is restricted

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 24 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 126:178818 MARPAT Full-text

TITLE: Organic electroluminescent device and

pyrrolo[3,4-c]pyrrol-based electron-transporting

material for it

INVENTOR(S): Enokida, Toshio; Tamano, Michiko

PATENT ASSIGNEE(S): Toyo Ink Mfg Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|----------|
| | | | | |
| JP 09003448 | A | 19970107 | JP 1995-157300 | 19950623 |
| JP 3704748 | B2 | 20051012 | | |
| PRIORITY APPLN. INFO. | : | | JP 1995-157300 | 19950623 |
| 0.7 | | | | |

AB The material is I [R1-4 = H, (un)substituted aliphatic (cyclic) group, (un)substituted aromatic ring, (un)substituted heterocycle; X1, X2 = 0, S, dicyanomethylene]. The device, including a pair of electrode retaining an emitting layer (and an electron-injecting layer) between them, contains I in the emitting layer (or in the electron-injecting layer). The device shows high luminance and long service life.

G1 = carbon chain (opt. substd. by 1 or more G3) / pyridy1
G2 = 0

Patent location: claim 1

L7 ANSWER 25 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 127:191922 MARPAT Full-text

TITLE: Polymerizable diketo pyrrolopyrroles, their

preparation and (co)polymerization INVENTOR(S): Eldin, Sameer Hosam; Iqbal, Abul

INVENTOR(S): Eldin, Sameer Hosam; Iqbal, Abul PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------|--------|----------|------------------|----------|
| | | | | |
| EP 787731 | A2 | 19970806 | EP 1997-810031 | 19970122 |
| EP 787731 | A3 | 19970813 | | |
| EP 787731 | B1 | 20020807 | | |
| R: CH, DE, | FR, GB | IT, LI | | |
| CA 2196137 | A1 | 19970731 | CA 1997-2196137 | 19970128 |
| TW 407149 | B | 20001001 | TW 1997-86100903 | 19970128 |
| CN 1165823 | A | 19971126 | CN 1997-102512 | 19970129 |
| US 5847156 | A | 19981208 | US 1997-789893 | 19970129 |
| JP 09323992 | A | 19971216 | JP 1997-16467 | 19970130 |
| US 6048918 | A | 20000411 | US 1998-146648 | 19980903 |
| PRIORITY APPLN. INFO | . : | | CH 1996-227 | 19960130 |
| | | | US 1997-789893 | 19970129 |

GI

AB The polymerizable dyes, which can be incorporated in or grafted to polymers to be colored, have the structure I [01, 02 = specified (unisubstituted (heterojaryl residues; R1 = C>3 polymerizable group; R2 = R1, C1-6 alkyl,

C6H4R3; R3 = H, C1-6 alkyl]. Thus, I (Q1 = Q2 = Ph, R1 = R2 = H) was condensed with 2 mol C1(CH2)60H, and the product was polymerized with hexamethylene disocvanate to give an orange-red polyurethane.

MSTP 1

G1 = pyridyl G8 = 97

H C ____C H ___G 1 2 __M e

G12 = (0-12) CH2

Patent location: claim 1

L7 ANSWER 26 OF 40 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 126:344541 MARPAT Full-text

TITLE: Colored metallic pigment and preparation thereof
INVENTOR(S): Suzuki, Masakazu; Nakaminami, Hiroshi; Homma, Seiji

PATENT ASSIGNEE(S): Japat Ltd., Switz. SOURCE: Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

AB

| PATENT NO. | KIND | DATE | APPLICATION NO. DATE | £ |
|-----------------|------------|----------|----------------------|-------|
| | | | | |
| EP 769535 | A2 | 19970423 | EP 1996-810681 199 | 51011 |
| EP 769535 | A3 | 19970917 | | |
| EP 769535 | B1 | 20000719 | | |
| R: CH, | DE, FR, GB | , IT, LI | | |
| US 5718753 | A | 19980217 | US 1996-730450 199 | 31015 |
| CA 2188216 | A1 | 19970421 | CA 1996-2188216 199 | 51018 |
| JP 09132730 | A | 19970520 | JP 1996-276256 199 | 51018 |
| PRIORITY APPLN. | INFO.: | | EP 1995-810653 199 | 51020 |

The instant invention relates to a process for the production of colored metallic pigments, as well as these colored metallic pigments themselves, their use to color high mol. weight organic material in the mass and compns. or masterbatches containing them. The colored metallic pigment consists essentially of multiple loose particles of 0.1-1000 µm size each, said particles comprising a core of a transition metals, half metal or alloy, preferably an aluminum flake, and a very fine, substantially continuous, uniform and homogeneous layer of organic pigment particles which is directly

in contact with the metallic core. The core may be superficially oxidized. The colored metallic pigment is prepared by a vacuum deposition process, said process being performed in an apparatus constructed, modified or charged in such a way that the organic pigment gas flows in direction of the metallic core. These pigments have high color intensity and reflectance and are useful for effect pigments in coatings.

MSTR 15



G1 = alkyl <containing 1-6 C>

(opt. substd. by 1 or more G3)

G4 = pyridyl

Patent location: claim 8

L7 ANSWER 27 OF 40 MARPAT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 126:306382 MARPAT Full-text
TITLE: Monophasic solid solutions with asymmetrical

pyrrolo[3,4-c]pyrroles as host, their preparation and

use as pigments

INVENTOR(S): Hao, Zhimin; Igbal, Abul

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW
DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PAT | ENT I | . OV | | KIN | 1D | DATE | | APE | LICATION NO. | DATE | |
|-------|-----|-------|------|-------|-----|-----|---------|----|-----|---------------|----------|--|
| | | | | | | | | - | | | | |
| | ΕP | 76593 | 19 | | A2 | 2 | 1997040 |)2 | EP | 1996-810617 | 19960917 | |
| | ΕP | 76593 | 19 | | A3 | 3 | 1998040 | 1 | | | | |
| | ΕP | 76593 | 19 | | B1 | L | 2001022 | 21 | | | | |
| | | R: | CH, | DE, | FR, | GB, | LI | | | | | |
| | TW | 4049 | 73 | | В | | 2000091 | .1 | TW | 1996-85110397 | 19960827 | |
| | US | 5756 | 746 | | A | | 1998052 | 26 | US | 1996-700349 | 19960923 | |
| | CA | 21863 | 319 | | A1 | L | 1997032 | 7 | CA | 1996-2186319 | 19960924 | |
| | CN | 1159 | 464 | | A | | 1997091 | .7 | CN | 1996-122532 | 19960925 | |
| | CN | 1076 | 744 | | В | | 2001122 | 6 | | | | |
| | JP | 09132 | 2728 | | A | | 1997052 | 20 | JP | 1996-255046 | 19960926 | |
| PRIOR | ITY | APPI | LN. | INFO. | : | | | | CH | 1995-2719 | 19950926 | |
| 0.7 | | | | | | | | | | | | |

AB The solid solns,, useful as light- and weather-resistant pigments, have the crystal structure of the major component (60-90 mol%) I [Q1, Q2 = (un)substituted Ph, naphthyl, 3- or 4-pyridyl; Q1 \neq Q2] and contain 10-40 mol% of a different I (Q1, Q2 = Ph, 3- or 4-pyridyl; Q1 \neq Q2] and contain 10-40 mol% of a different I (Q1, Q2 = Ph, 3- or 4-pyridyl, C64HR-3 or -4; R = F, Cl. CN, NO2, CF3, C1-4 alkyl, C1-4 alkoys, NRIR2; R1 = C1-4 alkyl; R2 = H, C1-4 alkyl) or of a quinacridone with limited substitution. Thus, a mixture of 1.4 mmol 2.9-dichloroquinacridone, 5.6 mmol I (Q1 = C6H4CMs-3-4, Q2 = C6H4C-4), and 1.18 g KOH in 40 mL DMSO at 50° was treated with a solution of 0.7 mL concentrated H2SOA in a mixture of 40 mL MeOH and 120 mL H2O during 15 min and stirred 5 h at 60° to precipitate the solid solution as a red powder.

MSTR 8

G1 = 4-pyridyl G8 = CO2CH2Ph

Patent location: claim 13

Note: substitution is restricted

L7 ANSWER 28 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 126:278956 MARPAT Full-text

TITLE: Solid solutions of 1,4-diketopyrrolopyrroles and polymers containing them

INVENTOR(S): Hao, Zhimin; Wallquist, Olof
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: Eur. Pat. Appl., 25 pp.

SOURCE: Eur. Pat. Appl. CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|--------|----------|-----------------|----------|
| | | | | |
| EP 763572 | A2 | 19970319 | EP 1996-810600 | 19960910 |
| EP 763572 | A3 | 19980401 | | |
| EP 763572 | B1 | 20020410 | | |
| R: CH, DE, | FR, GB | , LI | | |

| US 5821373 | A | 19981013 | US | 1996-712722 | 19960912 |
|------------------------|----|----------|----|--------------|----------|
| CA 2185618 | A1 | 19970319 | CA | 1996-2185618 | 19960916 |
| CN 1158873 | A | 19970910 | CN | 1996-122501 | 19960917 |
| CN 1076369 | В | 20011219 | | | |
| JP 09132575 | A | 19970520 | JP | 1996-245802 | 19960918 |
| PRIORITY APPLN. INFO.: | | | CH | 1995-2630 | 19950918 |
| CT | | | | | |

III

AB Solid solns. of 3,6-bis(4-biphenylyl)-2,5-dihydropyrrolo(3,4-c)pyrrole-1,4-dione (I) with II (A, B = aromatic or heterocyclic group) or III (R = H, halogen, alkyl, alkoxy) in a (20-90):(10-80) ratio have good pigment properties and dispersibility in plastics and coatings. In an example, a 1:4 solid solution obtained from I and II (A = B = Ph), with both compds. being initially mixed in the form of their N,N-bis(tert-butoxycarbonyl) derivs. for enhanced solubility, was used in a red sprayable and bakeable topcoat composition

MSTR 9

G1 = pyridyl G9 = CO2CH2Ph Patent location:

claim 5

TITLE: Soluble chromophores containing solubilizing groups

which can be easily removed, pigments therefrom and

their use

INVENTOR(S): Hall-Goulle, Veronique
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Can. Pat. Appl., 48 pp.

CODEN: CPXXEB

DOCUMENT TYPE: Patent
LANGUAGE: English

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO | | KIND | DATE | | PLICATION NO. | DATE |
|---------------|--------|--------|----------|----|---------------|----------|
| CA 218214 | 7 | A1 | 19970129 | | 1996-2182147 | 19960726 |
| TW 473518 | | В | 20020121 | TW | 1996-85108166 | 19960706 |
| TW 444006 | | В | 20010701 | TW | 1996-85108281 | 19960709 |
| EP 761772 | | A1 | 19970312 | EP | 1996-810476 | 19960719 |
| EP 761772 | | B1 | 20000315 | | | |
| R: C | H, DE, | FR, GB | , LI | | | |
| EP 764628 | | A1 | 19970326 | EP | 1996-810475 | 19960719 |
| EP 764628 | | B1 | 20010314 | | | |
| R: C | H, DE, | FR, GB | , LI | | | |
| US 575075 | | A | 19980512 | | 1996-681205 | 19960722 |
| US 606392 | 4 | A | 20000516 | US | 1996-681204 | 19960722 |
| JP 090489 | 29 | A | 19970218 | JP | 1996-197273 | 19960726 |
| JP 090528 | 68 | A | 19970225 | JP | 1996-197274 | 19960726 |
| CN 114858 | 5 | A | 19970430 | CN | 1996-112105 | 19960727 |
| US 622204 | | B1 | 20010424 | | 1998-6360 | 19980113 |
| US 635912 | | B1 | 20020319 | | 2001-767313 | 20010123 |
| RIORITY APPLN | . INFO | .: | | CH | 1995-2222 | 19950728 |
| | | | | | 1995-2968 | 19951019 |
| | | | | US | 1996-681205 | 19960722 |
| | | | | US | 1998-6360 | 19980113 |

AB Compds. of formula A(B)x, wherein x is an integer from 1 to 4, A is the radical of a chromophore of the quinacridone, anthraquinone, perylene, indigo, quinophthalone, isoindolinone, isoindoline, dioxazine, phthalocyanine, diketopyrrolopyrrole or azo series, which radical A contains x N-atoms linked with B, preferably with at least one immediately adjacent or conjugated carbonyl group. B is a group of formula CO2Q and, if x = 2, 3 or 4, can also be one, two or three hydrogen atom(s), and Q is a group of formula CR1R2CR3:CR4R5, CR1R2C.tplbond.CR6, or CR1R2X, where R1, R2, R3, R4, R5, R6 =H, organic group; X = optionally substituted Ph. These soluble chromophores can be readily converted to the corresponding pigments by heating, even in the substrate into which they can be incorporated without any difficulty in dissolved form. The pigments AHx can thus be readily incorporated into recording and luminescent materials. Examples are given for the preparation and use of bis(2-methyl-3-butyn-2-yl), bis(2-methyl-3-buten-2-yl), and bis(3methyl-2-buten-1-yl) dicarbonates as acylating agents to provide facile leaving groups for diphenylpyrrolo[3,4-c]pyrrolidinedione, guinacridone, and indigo. The thermal decomposition temps, required are at least 30° lower than those associated with di-tert-Bu dicarbonate.

G6 = 363

36 (O)-G15

G55 = pyridyl (opt. substd.) G56 = 132

, G (O)-G14

Patent location: claim 1

Note: also incorporates claim 11
Note: substitution is restricted

L7 ANSWER 30 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 126:20140 MARPAT Full-text

TITLE: Structured pigment coating and its manufacture and use

INVENTOR(S): Zambounis, John; Hofmann, Manfred

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 32 pp.

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A1 19961113 EP 742556 EP 742556 EP 1996-810278 19960501 B1 20021002 R: CH, DE, FR, GB, IT, LI, NL, SE TW 472072 B 20020111 TW 1996-85103597 19960326 TW 505647 B 20021011 TW 1996-85105241 19960502 US 5840449 A 19981124 US 1996-643723 19960506 CA 2176290 A1 19961113 JP 09003362 A 19970107 CA 1996-2176290 19960510 JP 1996-116268 19960510 CN 1150166 A 19970521 CN 1996-110346 19960511 CN 1085710 B 20020529 CN 1312339 A 20010912 CN 2000-137052 20001228 PRIORITY APPLN. INFO.: CH 1995-1394 19950512 AB Latent forms of pigments containing protected NH groups or phthalocyanines are applied in solution or melt form to a substrate and the protective groups are removed to provide the pigments as coatings on the substrate. The protective groups may be removed by means of heat, laser, or acid/base vapor. The coating is faster than sublimation or crystallization methods and selectivity may be exercised in regard to surface application and color development. The pigments may have applications as color filters or in information storage. In an example, a dioxane solution of N, N-bis(tert-butoxycarbonyl)-3,6-diphenyl-1,4-diketopyrrolo[3,4-c]pyrrole was applied to glass and heated to 200° to provide a coating of 2,5-dihydro-3,6-diphenyl-1,4-diketopyrrolo[3,4-c]pyrrole of excellent transparency and homogeneity.

MSTR 2

G1 = 112

G22 = 655

6850)-G49

G23 = 4-pyridyl

Patent location: claim 1

L7 ANSWER 31 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 125:181169 MARPAT Fuli-text

TITLE: Electrophotographic photoreceptor
INVENTOR(S): Takahashi, Ryuichi; Yamamoto, Kazuyo; Igbal, Abul;

Hao, Zhimin

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.; Japat Ltd

SOURCE: Eur. Pat. Appl., 46 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

| EP | 718697
718697
718697 | | A2
A3
B1 | 19960626
19960703
20011121 | EP | 1995-810788 | 19951213 |
|----------|----------------------------|--------|----------------|----------------------------------|----|--------------|----------|
| | R: CH, | DE, F | R, GB | , LI | | | |
| CA | 2165760 | | A1 | 19960623 | CA | 1995-2165760 | 19951220 |
| JP | 08234460 |) | A | 19960913 | JP | 1995-334416 | 19951222 |
| JP | 3641310 | | B2 | 20050420 | | | |
| US | 5718998 | | A | 19980217 | US | 1995-577333 | 19951222 |
| PRIORIT: | Y APPLN. | INFO.: | | | JP | 1994-320810 | 19941222 |
| GI | | | | | | | |

Ι

AB The invention is related to an electrophotog, bhotoreceptor, its preparation, and its use in electrophotog. The instant photoreceptor comprises a conductive substrate and a photosensitive layer containing an organic pigment as a charge-generating material, wherein the organic pigment is formed from a soluble organic pigment precursor. Particularly suitable soluble pigment precursors are compds. having formula ABI(D2)x or I, wherein A represents a chromophore residue of perylene, quinacridone, dioxazine, anthraquinone, azo, phthalocyanine, isoindolinone, isoindoline, indigo, quinophthalone, or pyrrolopyrrole with 1 to 5 N atoms bound to the D1 and D2 groups, whereby each N atom of A is bound to 0, 1, or 2 groups of D1 and D2, D1 and D2 are carboxylate groups, x is an integer of 0-4, L1 and L2 are halogen, amino, or alkoxy, and M2 is 2 hydrogen atoms or a metal or oxometal with at least 2 valences.

MSTP 1

G1-C(0)-G2

G23 = 245

2950)-G22

G41 = pyridyl

Derivative: or derivatives

Patent location: claim 2

Note: substitution is restricted

L7 ANSWER 32 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER:

124:319682 MARPAT Full-text TITLE: Mixed crystals and solid solutions of

1,4-diketopyrrolo[3,4-c]pyrroles and their preparation

and polymeric materials containing them

INVENTOR(S): Hao, Zhimin; Igbal, Abul; Medinger, Bernhard;

Wallquist, Olof PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|--------|--------------|-----------------|----------|
| | | | | |
| EP 704497 | A1 | 19960403 | EP 1995-810590 | 19950920 |
| EP 704497 | B1 | 19991215 | | |
| R: CH, DE, | FR, GB | , IT, LI, NL | | |
| CA 2159171 | A1 | 19960329 | CA 1995-2159171 | 19950926 |
| CN 1130661 | A | 19960911 | CN 1995-117786 | 19950927 |
| CN 1066767 | В | 20010606 | | |
| JP 08199085 | A | 19960806 | JP 1995-250465 | 19950928 |
| JP 3862772 | B2 | 20061227 | | |
| US 5708188 | A | 19980113 | US 1995-535438 | 19950928 |
| PRIORITY APPLN. INFO. | .: | | CH 1994-2936 | 19940928 |
| GI | | | | |

ΙI

AB Equimolar mixts. (crystalline) and solid solns. of the sym. diaryldiketopyrrolopyrroles I and II (A1, A2 = aromatic or heterocyclic aryl groups) with pigment properties equivalent to those of the corresponding individual asym. diaryldiketopyrrolopyrroles (more difficult to prepare) are obtained by first converting the pigments into a soluble form such as the Ntert-butoxycarbonyl derivative, mixing the soluble derivs., and then precipitating the mixed crystals by removal of the solubilizing groups. The mixts. are suitable for coloration of plastics and pigments, especially when incorporated into masterbatches. Thus, 1,4-diketo-3,6-diphenylpyrrolo[3,4c]pyrrole was treated with di-tert-Bu dicarbonate to provide the N, N'bis(tert-butoxycarbonyl) derivative (III). 1,4-Diketo-3,6-bis(4-tertbutylphenyl)pyrrolo[3,4-c]pyrrole was similarly converted and the product was mixed with an equimolar amount of III and then treated with p-toluenesulfonic acid to remove the N-tert-butoxycarbonyl groups and precipitate 1:1 mixed crystals of I (A1 = Ph) and II (A2 = 4-tert-butylphenyl).

MSTR 3

G1 = pyridyl

Patent location:

claim 5

L7 ANSWER 33 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 124:29748 MARPAT Full-text

ACCESSION NUMBER: 124:29748 MARPAT Full-text
TITLE: Preparation of amine oxide grou

TITLE: Preparation of amine oxide group-containing pyrrolo[3,4-c]pyrroles as photoreceptors

INVENTOR(S): Hao, Zhimin; Iqbal, Abul; Kirchmayr, Rudolf PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE EP 673939 EP 1995-810164 19950313 A1 19950927 EP 673939 B1 19961023 R: CH, DE, FR, GB, LI US 5502196 A 19960326 US 1995-404012 19950314 JP 07268230 19951017 JP 1995-60162 19950320 A JP 3722235 B2 20051130 PRIORITY APPLN. INFO.: CH 1994-843 19940321

G1

Title compds. [I; R1, R2 = H, alkyl, alkoxy, etc.; ≥1 of R3, R4 = heteroaryl amine oxide and the other may be (un)substituted Ph, naphthyl, etc.] were prepared Thus, 4-cyanopyridine N-oxide was cyclocondensed with (CH2CO2CHMe2)2 to give I (R1 = R2 = H, R3 = R4 = 4-pyridyl N-oxide). Formulations comprising I were prepared No performance data were given.

MSTR 1

G1 = 38

= 194

= alkyl <containing 1-18 C> Patent location: claim 1

Note: substitution is restricted

L7 ANSWER 34 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 123:183553 MARPAT Full-text TITLE:

Compositions for making structured color images and

application thereof.

INVENTOR(S): Schaedeli, Ulrich; Zambounis, John S.; Igbal, Abul;

Hao, Zhimin; Dubas, Henri

PATENT ASSIGNEE(S): Shell Internationale Research Maatschappij BV, Neth.

Eur. Pat. Appl., 56 pp. SOURCE:

CODEN: EPXXDW DOCUMENT TYPE: Patent. LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. | | | | KIND | DATE | API | PLICATION NO. | DATE |
|------|------------|-------|------|-------|--------|----------|-----|---------------|----------|
| | | | | | | | | | |
| | EP | 6547 | 11 | | A1 | 19950524 | EP | 1994-810649 | 19941114 |
| | EP | 6547 | 11 | | B1 | 19990602 | | | |
| | | R: | CH, | DE, | FR, GB | , IT, LI | | | |
| | CA | 2135 | 657 | | A1 | 19950523 | CA | 1994-2135657 | 19941118 |
| | US | 5879 | 855 | | A | 19990309 | US | 1994-341721 | 19941118 |
| | JP | 0800 | 6242 | | A | 19960112 | JP | 1994-287689 | 19941122 |
| | JP | 3510 | 927 | | B2 | 20040329 | | | |
| | US | 6040 | 108 | | A | 20000321 | US | 1998-204190 | 19981203 |
| | US | 6180 | 315 | | B1 | 20010130 | US | 1999-458771 | 19991210 |
| PRIO | RITY | Y APP | LN. | INFO. | . : | | EP | 1993-810807 | 19931122 |
| | | | | | | | US | 1994-341721 | 19941118 |
| | | | | | | | US | 1998-204190 | 19981203 |
| | | | | | | | | | |

Compns. for making structured color images comprising (a) a soluble pigment AB precursor which can be transformed to an insol. pigment by chemical, thermal, photolytic or radiation-induced method, and (b) a binder polymer or prepolymer, or a pos. or neq. resist-type resin which can be structured by crosslinking, polymerization or depolymn, by applying heat or electromagnetic irradiation The compns. can be applied to optical and thermal recording, printing, and the production of color filters for liquid crystal displays, with high accuracy, high transparency and high stability.

MSTP 1

G18-G1

G1 = 11

= bond G18 = 654

G27 = CO2Bu-t G46 = pyridyl

Patent location: claim 3

Note: substitution is restricted

L7 ANSMER 35 OF 40 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 120:311872 MARPAT Full-text
TITLE: Organic electroluminescent device
INVENTOR(S): Oonishi, Toshihiro; Doi, Hideji
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan

PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 7 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 05320633 A 19931203 JP 1992-132213 19920525

PRIORITY APPLN. INFO:: JP 1992-132213 19920525

AB The device contains a luminescent layer, sandwiched by a pair of electrodes, containing 0.005-15 parts pyrrolo[3,4-c]pyrrole compound I (R1-2 = H, C1-12 alkyl, C6-14 aryl, Ar1-2 = C6-14 aryl, C4-12 heterocyclic; X = 0, S, Se).

MSTR 1

G1 = alkyl <containing 1-12 C>

G2 = pyridyl G3 = 0

Patent location: claim 1

L7 ANSWER 36 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 118:29594 MARPAT Full-text

TITLE: Organic electroluminescent element

INVENTOR(S): Matsumura, Michio; Kudo, Tetsu; Wooden, Gary

PATENT ASSIGNEE(S): Japat Ltd., Switz.

SOURCE: Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|----------|
| | | | | |
| EP 499011 | A1 | 19920819 | EP 1991-810097 | 19910212 |
| R: GB | | | | |
| PRIORITY APPLN. INFO. | : | | EP 1991-810097 | 19910212 |
| OT. | | | | |

AB Electroluminescent devices are described which employ as a light-emitting material compds. described by the general formula I (21 and 22 are independently selected from 0 and S; R1 and R2 are independently selected from H, C1-18 alkyl groups, C3-18 alkenyl groups in which the double bond is not in the C1 position, or a phenylalkyl group with a C1-5 alkyl group; A1 and A2 are independently selected from 3-pyridyl, 4-pyridyl, or groups described by the general formula II in which X1 and X5 are independently selected from H, C1-5 alkyl groups, C1-5 alkoxy groups, or halogens, and X1, X3, and X4 are independently selected from H, C1-5 alkyl groups, C1-5 alkoxy groups, dialkylamino groups with 1-5 (/alkyl group, N, N, -CF3, or halogens).

MSTR 1

G1 = O G2 = CH2Ph G4 = 3-pyridyl

Patent location: claim 1

Note: substitution is restricted

L7 ANSWER 37 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 116:265222 MARPAT Full-text

TITLE: New electrochromic compositions based on

diketopyrrolopyrroles

INVENTOR(S): Mizuguchi, Jin; Rochat, Alain Claude
PATENT ASSIGNEE(S): Ciba-Geigv A.-G., Switz.

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
|-----------------------|--------|----------|--------------------------|
| | | | |
| EP 467846 | A1 | 19920122 | EP 1991-810557 19910711 |
| EP 467846 | B1 | 19940831 | |
| R: CH, DE, | FR, GB | , LI | |
| US 5169953 | A | 19921208 | US 1991-730418 19910716 |
| CA 2047392 | A1 | 19920121 | CA 1991-2047392 19910718 |
| JP 04234392 | A | 19920824 | JP 1991-178591 19910719 |
| US 5298063 | A | 19940329 | US 1992-945075 19920915 |
| PRIORITY APPLN. INFO. | . : | | CH 1990-2418 19900720 |
| | | | US 1991-730418 19910716 |

AB The title compns. comprise a 1,4-diketopyrrolo-[3,4-c]-pyrrolo derivative combined with an auxiliary redox system of the ferrocyanide, ferrocene, or NH4-Fe (II) sulfate type in combination with ≥1 conductive sait. Use of the compns. in electrochromic displays and methods for producing displays using the compns. are described. Selected derivs. are also claimed.

MATR 4B

G1 = pyridyl (opt. substd.)

G4 = alkyl <containing 1-12 C>

(substd. by alkoxycarbonyl <containing 1-4 C>)

Patent location: claim 1

L7 ANSWER 38 OF 40 MARPAT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 113:68324 MARPAT $\underline{\text{Full-text}}$

TITLE: Aminated diketodi(het)arylpyrrolopyrroles as

photoconductors

INVENTOR(S): Rochat, Alain Claude; Wallquist, Olof; Iqbal, Abul;

Mizuguchi, Jin

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PAT | ENT NO. | KIND | DATE | APPL | LICATION NO. | DATE |
|----------|------------|----------|----------|------|--------------|----------|
| | | | | | | |
| EP | 353184 | A1 | 19900131 | EP 1 | 1989-810523 | 19890711 |
| EP | 353184 | B1 | 19940615 | | | |
| | R: CH, DE | , FR, GB | . LI | | | |
| KR | 9711391 | B1 | 19970710 | KR 3 | 1989-10269 | 19890719 |
| JP | 02088579 | A | 19900328 | JP 1 | 1989-186198 | 19890720 |
| JP | 3076346 | B2 | 20000814 | | | |
| US | 5973146 | A | 19991026 | US 1 | 1993-128332 | 19930929 |
| JP | 11344817 | A | 19991214 | JP 1 | 1999-128494 | 19990510 |
| JP | 3076557 | B2 | 20000814 | | | |
| PRIORITY | APPLN. INF | 0.: | | CH 1 | 1988-2769 | 19880720 |
| | | | | US 1 | 1989-381212 | 19890717 |
| | | | | JP 1 | 1989-186198 | 19890720 |
| | | | | US 1 | 1993-47886 | 19930415 |

GI

AB The title compds. I (R1 = substituted aminophenyl, substituted 5-amino-2-pyridyl, or substituted 6-amino-3-pyridyl; R2 = substituted Fh, substituted 2-pyridyl, or substituted 3-pyridyl; R3, R4 = H, C1-18 alkyl, carbamoyl, C2-13 alkylcarbamoyl, C3-25 dialkylcarbamoyl, and unsubstituted or substituted Ph or benzyl) are prepared for use as photoconductors in electrophotog, photoreceptors. Thus, 1,6-diketo-3,6-bis(4- bromophenyl)pyrrolo[3,4-c]pyrrole was reacted with Me2N to give 1,6-diketo-3,6-bis(4- dimethylaminophenyl)pyrrolo[3,4-c]pyrrole (II) (69.3% yield). A layer of II combined with a larger of p- diethylaminobenzaldehyde diphenylhydrazone on an Al support produced a photoreceptor with a photosensitivity (E1/2) of 8

MSTR 1

mJ/cm2.

$$G2 = 51 / 20$$



Patent location: claim 1

L7 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NOMBER: 2007:1151141 CAPLUS Full-text DOCCUMENT NUMBER: 147:460224

TITLE: Field-effect transistors

INVENTOR(S): Ikeda, Masaaki; Kuwahara, Hirokazu; Adachi, Chihaya PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 24pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|--------------------------------|----------------------|
| JP 2007266285
PRIORITY APPLN. INFO.: | Α | 20071011 | JP 2006-89045
JP 2006-89045 | 20060328
20060328 |

AB FETs use, as semiconductors, the compds. (I), where X1, X2 = 0, S or Se; and R1-4 = H, or aliphatic hydrocarbon or aromatic groups which may be substituted.

L7 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2008 ACS on STN 2002:712239 CAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 138:116787

TITLE: DPP dves as ligands in transition-metal complexes AUTHOR(S): Lorenz, Ingo-Peter; Limmert, Michael; Maver, Peter; Piotrowski, Holger; Langhals, Heinz; Poppe, Martin;

Polborn, Kurt

CORPORATE SOURCE: Department Chemie, Universitat Munchen, Munchen, 81377, Germany

SOURCE: Chemistry--A European Journal (2002), 8(17), 4047-4055

CODEN: CEUJED; ISSN: 0947-6539

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:116787

GI

The DPP dyes (= diketopyrrolopyrrole) (I; R = Ph, 4-Me, 4-Cl, 4-NCC6H4, 4-AB pyridyl, 4-thienyl) (H2L) are deprotonated to give the corresponding dianions. These are treated with two moles of the transition-metal complexes [LnMX] = [(Ph3P)2MX] (M = Cu, Aq; X = C1, NO3), [(Ph3P)AuC1], [(Et3P)AuC1],

[(tBuNC)AuCl], [(Ph3P)2PdCl2], and [(Ph3P)2PtCl2] to give the novel bismetalated DPP dyes [LlnM(µ-L)MLln] (M = Cu, Aq, Au, PdCl, PtCl; L1 = PPh3, PEt3, t-BuNC). In comparison with the starting materials, these compds, show better solubilities, high fluorescence quantum yields ($\Phi \geq 80$ %), and bathochromic absorptions. The compds. [PPh3Cu(μ -L)CuPPh3] (R = 4-ClC6H4) 4c, [Ph3PAg(u-L)AgPPh3] (R = Ph) 5a, [Ph3PAu(u-L)AuPPh3] (R = 4-MeC6H4 6b, p-ClC6H4 6c, 4-pyridyl 6e), [Et3PAu(μ -L)AuPEt3] (R = 4-ClC6H4) 7c, and [t-BuNCAu(u-L)AuCNBu-t| (R = 4-C1C6H4) 8c were characterized by x-ray crystallog. The Cu and Aq atoms in 4c and 5a are trigonal planar and are surrounded by the P atoms of the phosphine ligands and the N atom of the DPP diamion of I. Both metals are somewhat forced out-of-plane, and the P2M plane and the Ph planes of R1 are twisted by $>70^{\circ}$ and $<25^{\circ}$, resp., towards the chromophore plane. The Au atoms in 6-8 are linearly coordinated to one N and one P (6b, c, e, 7c) or one C atom (8c), resp. The Au atoms are only slightly pressed out-of-plane, and the P substituents are staggered so that there is enough space for the planarization of R1 into the plane of the chromophore. Compound 8c shows intermol. d10-d10 interactions between Aul centers of different mols., and these interactions lead to infinite chains of parallel oriented mols. in a gauche conformation of neighbors (torsion angle = 150°) in the crystal. REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> end
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
COST IN U.S. DOLLARS
SINCE FILE TOTAL

| FULL ESTIMATED COST | ENTRY
452.13 | SESSION
452.80 |
|--|---------------------|-------------------|
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE
ENTRY | TOTAL
SESSION |
| CA SUBSCRIBER PRICE | -30.85 | -30.85 |

STN INTERNATIONAL LOGOFF AT 16:26:24 ON 12 FEB 2008